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Crustacea Decapoda : Deep-water swimming crabs from the South-West Pacific, particularly New Caledonia (Brachyura, Portunidae)

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ABSTRACT

Nineteen species of deep water Portunids were collected by the French expeditions in the waters around New Caledonia, Loyalty Islands, Chesterfield Islands, South Pacific Islands (Wallis and Futuna) and by the Franco-Indonesian Expedition KARUBAR in the waters around the islands of Kai, Aru and Tanimbar, Indonesia. *Charybdis* (*Charybdis*) *rosaea* is rediscovered from Indonesian waters, the type specimen - a dry female preserved in Paris Museum - is identified here as the holotype. Four new species, *Nectocarcinus caledonicus, Nectocarcinus pubescens, Brusinia profunda* and *Portunus lecromi,* are described. Almost all the species collected from New Caledonian and adjacent waters are new records.

RÉSUMÉ

Crustacea Decapoda : Crabes nageurs d'eau profonde du Sud-Ouest Pacifique et plus particulièrement de la Nouvelle-Calédonie (Brachyura, Portunidae).

Dix-neuf espèces de Portunidae d'eau profonde ont été récoltées par les expéditions françaises faites durant ces dernières années au voisinage de la Nouvelle-Calédonie, des îles Loyauté, Chesterfield, Wallis et Futuna (Pacifique sud), et par l'expédition franco-indonésienne KARUBAR faite autour des îles Kai, Aru et Tanimbar, en Indonésie. *Charybdis* (*Charybdis*) *rosaea*, connu uniquement par un spécimen, a été retrouvé dans les eaux indonésiennes; le type, une femelle conservée à sec au Muséum national d'Histoire naturelle, à Paris, est désigné comme holotype. Quatre nouvelles espèces sont décrites : *Nectocarcinus caledonicus, Nectocarcinus pubescens, Brusinia profunda* et *Portunus lecromi*. Presque toutes les espèces récoltées de la Nouvelle-Calédonie et des îles avoisinantes y sont signalées pour la première fois.

ABSTRAK

Kepiting dari suku Portunidae laut dalam yang telah berhasil dikumpulkan dalam beberapa ekspedisi di sekitar perairan Kaledonia Baru, Pulau-Pulau Chesterfield, Kepulauan Pasifik Selatan dan perairan sekitar Pulau - Pulau Kai, Aru dan Tanimbar (Indonesia) berjumlah 19 jenis. *Charybdis* (*Charybdis*) *rosaea* untuk pertama kalinya ditemukan kembali semenjak dideskripsi. Spesimen tipe dari kepiting ini yang disimpan dalam bentuk kering di Museum National d'Histoire Naturelle Paris bersama ini dinyatakan sebagai holotype. Empat jenis baru, *Nectocarcinus caledonicus, Nectocarcinus pubescens, Brusinia profunda* dan *Portunus lecromi* dipertelakan. Hampir semua jenis yang dikumpulkan dari perairan Kaledonia Baru dan sekitarnya merupakan temuan yang pertama kali.

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INTRODUCTION

The deep-water Portunids of New Caledonian and adjacent waters are very poorly known. Over almost the last decade, French marine scientists have conducted several expeditions, collecting marine biota from shallow as well as deep waters, including crabs of the family Portunidae. The specimens collected by the Franco-Indonesian Expedition KARUBAR are also included in this study. The term "deep water" refers to species collected from waters deeper than 100 meters. In total 19 species were collected, 17 from New Caledonian and adjacent waters and two species, *Charybdis (Charybdis) rosaea* and *Charybdis (Gonioneptunus) bimaculata*, were only recorded from Indonesian waters. Four new species, *Nectocarcinus caledonicus, Nectocarcinus pubescens, Brusinia profunda* and *Portunus lecromi* are described. The placement of *N. caledonicus*, very close to *N. bullatus*, an Atlantic species, needs further study, as both are morphologically different from other Indo-West Pacific *Nectocarcinus*. The type specimen of *Charybdis (Charybdis) rosaea*, a female preserved dry in the Muséum national d'Histoire Naturelle, Paris, is identified here as the holotype. This species is suspected to be a shallow-water species, swimming near the surface and caught while the trawl was being raised to the surface. This could also be the case for the *Portunus stephensoni* and *P. hastatoides* reported here. All the species recorded from New Caledonian and adjacent waters are new records for the area, while *Benthochascon hemingi* is reported from Indonesian waters for the first time.

The synonymies are restricted to some main references. Measurements of the specimens (length x breadth) are in milimeters.

Material is lodged in the Muséum national d'Histoire naturelle, Paris (MNHN), the Pusat Penelitian dan Pengembangan Oseanologi, Jakarta (POLIPI) and the National Museum of Natural History, Washington (USNM). Where the depository is not stated, the specimens are in the MNHN, Paris.

LIST OF STATIONS AND SPECIES COLLECTED

New Caledonia

"VAUBAN" DREDGINGS 1978-1979.

Dredge 3. — 23.5.1978, 22°17'S, 167°12'E, 390 m : *Parathranites orientalis.*
Dredge 4. — 23.5.1978, 22°17'S, 167°13'E, 400 m : *Parathranites orientalis.*

LAGON.

Stn DW 367. — 30.11.1984, 22°36.0'S, 167°03.8'E, 105 m : *Portunus dubius.*
Stn DW 538. — 06.03.1985, 19°07.0'S, 163°21.5'E, 191 m : *Portunus haanii.*
Stn DW 933. — 27.04.1988, 20°44.9'S, 164°14.9'E, 100 m : *Lupocyclus tugelae, Portunus orbitosinus.*
Stn CP 1062. — 05.05.1988, 20°14.9'S, 163°53.0'E, 300-320 m : *Lupocyclus tugelae, Portunus orbitosinus, P. stephensoni.*
Stn DW 1153. — 29.20.1989, 18°58.4'S, 163°23.0'E, 330 m : *Parathranites orientalis.*

BIOCAL.

Stn CP 84. — 6.09.1985, 20°43.49'S, 167°00.27'E, 150-210 m : *Parathranites orientalis.*
Stn CP 110. — 9.09.1985, 22°12.38'S, 167°06.43'E, 275-320 m : *Parathranites orientalis.*

MUSORSTOM 4.

Stn DW 149. — 14.09.1985, 19°07.6'S, 163°22.7'E, 155 m : *Portunus haanii.*
Stn DW 150. — 14.09.1985, 19°07.5'S, 163°22.1'E, 110 m : *Portunus haanii.*
Stn DW 151. — 14.09.1985, 19°07.0'S, 163°22.0'E, 200 m : *Portunus haanii.*
Stn CP 170. — 17.09.1985, 18°57.0'S, 163°12.6'E, 485 m : *Ovalipes iridescens, Nectocarcinus pubescens* sp. nov.
Stn CP 171. — 17.09.1985, 18°57.8'S, 163°14.0'E, 435 m : *Parathranites orientalis, Ovalipes iridescens.*
Stn CP 172. — 17.09.1985, 19°01.2'S, 163°16.0'E, 275-330 m : *Parathranites orientalis.*

Stn CC 173. — 17.09.1985, 19°02.5'S, 163°18.8'E, 290 m : *Parathranites orientalis.*
Stn CP 178. — 18.09.1985, 18°56.3'S, 163°12.9'E, 520 m : *Ovalipes iridescens.*
Stn CP 179. — 18.09.1985, 18°56.6'S, 163°13.7'E, 475 m : *Ovalipes iridescens.*
Stn CP 180. — 18.09.1985, 18°56.8'S, 163°17.7'E, 450 m : *Ovalipes iridescens, Nectocarcinus pubescens* sp. nov.
Stn DW 181. — 18.09.1985, 18°57.2'S, 163°22.4'E, 355 m : *Parathranites orientalis.*
Stn DW 186. — 19.09.1985, 19°07.2'S, 163°29.7'E, 205 m : *Lissocarcinus polybioides.*
Stn CP 192. — 19.09.1985, 18°59.3'S, 163°25.0'E, 320 m : *Brusinia profunda* sp. nov., *Parathranites orientalis.*
Stn CP 200. — 20.09.1985, 18°53.8'S, 163°14.1'E, 545 m : *Ovalipes iridescens.*
Stn CC 201. — 20.09.1985, 18°55.8'S, 163°13.8'E, 500 m : *Ovalipes iridescens, Nectocarcinus pubescens* sp. nov.
Stn CC 202. — 20.09.1985, 18°58.0'S, 163°59.3'E, 560 m : *Ovalipes iridescens.*
Stn CP 236. — 02.10.1985, 22°11.3'S, 167°15.0'E, 550 m : *Ovalipes iridescens.*
Stn CC 248. — 04.10.1985, 22°09.5'S, 167°10.0'E, 385 m : *Parathranites orientalis.*

SMIB 2.
Stn DW 21. — 20.09.1986, 22°40'S, 167°41'E, 110 m : *Ovalipes iridescens.*

CHALCAL 2.
Stn DW 80. — 31.10.1986. 23°26.7'S, 168°01.8'E, 80-160 m : *Thalamita spinifera.*
Stn DW 83. — 31.10.1986. 23°20.3'S, 168°05.5'E, 200 m : *Nectocarcinus caledonicus* sp. nov.
Stn DW 84. — 31.10.1986. 23°23.8'S, 168°07.1'E, 170 m : *Thalamita spinifera.*

CALSUB.
Stn PL 18. — 09.03.1989, 22°46'S, 167°20'E, 290-50 m : *Charybdis* (*Charybdis*) *rufodactylus.*

SMIB 5.
Stn DW 81. — 9.09.1989, 22°38.2'S, 167°34.8'E, 110 m : *Portunus dubius.*
Stn DW 96. — 14.09.1989, 23°00.0'S, 168°18.7'E, 245 m : *Nectocarcinus caledonicus* sp. nov., *Parathranites orientalis, Portunus dubius.*

AZTÈQUE.
Stn CH 10. — 15.02.1990, 22°52.8'S, 167°33.5'E, 355 m : *Ovalipes iridescens.*

SMIB 6.
Stn DW 107. — 2.03.1990, 19°07.6'S, 163°30.2'E, 195-205 m : *Parathranites orientalis, Thalamita spinifera.*
Stn DW 117. — 2.03.1990, 18°59.4'S, 163°25.4'E, 290 m : *Brusinia profunda* sp. nov.
Stn DW 126. — 3.03.1990, 18°59.1'S, 163°22.7'E, 330 m : *Parathranites orientalis, Portunus haani.*
Stn DW 127. — 4.03.1990, 19°06.8'S, 163°22.6'E, 205 m : *Portunus haanii.*
Stn DW 128. — 4.03.1990, 19°06.2'S, 163°22.4'E, 215 m : *Portunus haanii.*
Stn DW 130. — 4.03.1990, 19°04.9'S, 163°21.0'E, 230 m : *Charybdis* (*Charybdis*) *rufodactylus.*
Stn DW 137. — 4.03.1990, 19°00.3'S, 163°18.3'E, 330 m : *Parathranites orientalis.*

BATHUS 3.
Stn DW 828. — 29.10.1993, 23°22'S, 168°01'E, 318-360 m : *Nectocarcinus caledonicus* sp. nov.

HALIPRO 1.
Stn CP 851. — 19.03.1994, 21°43'S, 166°37'E, 314-364 m : *Charybdis* (*Charybdis*) *rufodactylus.*
Stn CP 852. — 19.03.1994, 21°44'S, 166°36'E, 253-266 m : *Charybdis* (*Charybdis*) *rufodactylus.*
Stn CP 854. — 19.03.1994, 21°40'S, 166°38'E, 650-780 m : *Benthochascon hemingi.*
Stn CP 855. — 20.03.1994, 21°45'S, 166°37'E, 204-220 m : *Charybdis* (*Charybdis*) *rufodactylus.*
Stn CP 856. — 29.03.1994, 21°44'S, 166°37'E, 311-365 m : *Charybdis* (*Charybdis*) *rufodactylus.*
Stn CP 863. — 22.03.1994, 21°31'S, 166°20'E, 190-227 m : *Lupocyclus philippinensis.*
Stn CP 872. — 30.03.1994, 23°02'S, 166°52'E, 620-700 m : *Benthochascon hemingi.*

Loyalty Islands

MUSORSTOM 6.

Stn DW 391. — 13.02.1989, 20°47.35'S, 167°05.70'E, 390 m : *Parathranites orientalis.*
Stn DW 397. — 13.02.1989, 20°47.35'S, 167°05.17'E, 380 m : *Parathranites orientalis.*
Stn DW 398. — 13.02.1989, 20°47.19'S, 167°05.65'E, 370 m : *Parathranites orientalis.*
Stn DW 399. — 14.02.1989, 20°41.80'S, 167°00.20'E, 282 m : *Parathranites orientalis.*
Stn DW 406. — 15.02.1989, 20°40.65'S, 167°06.80'E, 373 m : *Parathranites orientalis.*
Stn DW 407. — 15.02.1989, 20°40.70'S, 167°06.60'E, 360 m : *Parathranites orientalis.*
Stn DW 411. — 15.02.1989, 20°40.65'S, 167°03.35'E, 424 m : *Parathranites orientalis.*
Stn DW 412. — 15.02.1989, 20°40.60'S, 167°03.75'E, 437 m : *Ovalipes iridescens.*
Stn DW 413. — 15.02.1989, 20°40.10'S, 167°03.50'E, 463 m : *Parathranites orientalis.*
Stn CC 415. — 15.02.1989, 20°40.20'S, 167°03.95'E, 461 m : *Parathranites orientalis.*
Stn DW 417. — 16.02.1989, 20°41.80'S, 167°03.65'E, 283 m : *Parathranites orientalis.*
Stn DW 418. — 16.02.1989, 20°41.75'S, 167°03.35'E, 283 m : *Parathranites orientalis.*
Stn DW 422. — 16.02.1989, 20°26.20'S, 167°40.31'E, 257 m : *Parathranites orientalis.*
Stn DW 423. — 16.02.1989, 20°25.85'S, 167°40.50'E, 280 m : *Parathranites orientalis, Charybdis (Charybdis) rufodactylus.*
Stn DW 428. — 17.02.1989, 20°23.54'S, 167°12.57'E, 420 m : *Parathranites orientalis.*
Stn DW 453. — 20.02.1989, 21°00.50'S, 167°26.90'E, 250 m : *Parathranites orientalis.*
Stn CC 455. — 20.02.1989, 20°00.65'S, 167°26.08'E, 260 m : *Parathranites orientalis.*
Stn DW 456. — 20.02.1989, 21°00.71'S, 167°26.35'E, 240 m : *Parathranites orientalis, Portunus dubius.*
Stn DW 457. — 20.02.1989, 21°00.42'S, 167°28.71'E, 353 m : *Parathranites orientalis.*
Stn DW 458. — 20.02.1989, 21°00.93'S, 167°29.96'E, 400 m : *Parathranites orientalis.*
Stn DW 461. — 21.02.1989, 21°06.00'S, 167°26.20'E, 240 m : *Parathranites orientalis, Portunus dubius.*
Stn CP 464. — 21.02.1989, 21°02.30'S, 167°31.60'E, 430 m : *Parathranites orientalis, Ovalipes iridescens.*
Stn CP 465. — 21.02.1989, 21°03.55'S, 167°32.25'E, 480 m : *Ovalipes iridescens.*
Stn CP 466. — 21.02.1989, 21°05.25'S, 167°32.20'E, 540 m : *Ovalipes iridescens.*
Stn CP 467. — 21.02.1989, 21°05.13'S, 167°32.11'E, 575 m : *Ovalipes iridescens.*
Stn CC 470. — 21.02.1989, 21°04.40'S, 167°33.20'E, 560 m : *Ovalipes iridescens.*
Stn DW 479. — 22.02.1989, 21°09.13'S, 167°54.95'E, 310 m : *Parathranites orientalis.*
Stn DW 480. — 22.02.1989, 21°08.50'S, 167°55.98'E, 380 m : *Parathranites orientalis.*
Stn DW 487. — 23.02.1989, 21°23.30'S, 167°46.40'E, 500 m : *Ovalipes iridescens.*

VOLSMAR.

Stn DW 42. — 08.06.1989, 22°17.0'S, 168°41.5'E, 340-400 m : *Brusinia profunda* sp. nov.

Mathew and Hunter Islands

VOLSMAR.

Stn DW 16. — 03.06.1989, 22°25.1'S, 171°40.7'E, 420-500 m : *Parathranites orientalis.*

Vanuatu

MUSORSTOM 8.

Stn CP 963. — 21.09.1994, 20°20.10'S, 169°49.08'E, 400-440 m : *Parathranites orientalis.*
Stn CP 1017. — 27.09.1994, 17°52.80'S, 168°26.20'E, 294-295 m : *Parathranites orientalis.*
Stn CP 1036. — 29.09.1994, 18°01.00'S, 168°48.20'E, 920-950 m : *Charybdis (Charybdis) rufodactylus.*
Stn CP 1071. — 04.10.1994, 15°36.63'S, 167°16.34'E, 180-191 m : *Parathranites orientalis.*
Stn CP 1086. — 05.10.1994, 15°36.58'S, 167°16.32'E, 182-215 m : *Lupocyclus philippinensis.*
Stn CP 1103. — 07.10.1994, 15°03.87'S, 167°07.76'E, 165-163 m : *Lissocarcinus polybioides.*

Chesterfield Islands

CHALCAL 1.

Stn DC 3. — 13.07.1984, 21°14.00'S, 162°16.40'E, 120-150 m, calcareous algae : *Portunus lecromi* sp. nov.
Stn DC 33. — 19.07.1984, 19°44.80'S, 158°25.80'E, 205 m : *Portunus hastatoides.*
Stn DC 35. — 21.07.1984, 19°44.84'S, 158°25.83'E, 210 m : *Portunus haanii.*
Stn CP 10. — 22.07.1984, 20°00.20'S, 158°46.60'E, 225 m : *Parathranites orientalis, Portunus dubius.*

MUSORSTOM 5.

Stn DW 252. — 07.10.1986, 25°08.53'S, 159°55.11'E, 300-310 m : *Nectocarcinus caledonicus* sp. nov.
Stn CP 268. — 09.10.1986, 24°44.70'S, 159°39.20'E, 280 m : *Parathranites orientalis.*
Stn CP 276. — 09.10.1986, 24°48.9'S, 159°40.9'E, 269-258 m : *Parathranites orientalis.*
Stn DW 282. — 10.10.1986, 24°11.55'S, 159°32.22'E, 226-230 m : *Parathranites orientalis.*
Stn DW 284. — 10.10.1986, 24°09.96'S, 159°333.49'E, 255-230 m : *Parathranites orientalis.*
Stn DW 285. — 10.10.1986, 24°09.35'S, 159°34.04'E, 245-255 m : *Parathranites orientalis.*
Stn CP 288. — 10.10.1986, 24°04.8'S, 159°36.8'E, 270 m : *Parathranites orientalis.*
Stn CP 289. — 10.10.1986, 24°01.5'S, 159°38.4'E, 273 m : *Parathranites orientalis.*
Stn CP 309. — 12.10.1986, 22°10.20'S, 159°22.80'E, 340 m : *Parathranites orientalis.*
Stn DW 328. — 15.10.1986, 20°22.80'S, 158°43.60'E, 355-340 m : *Brusinia profunda* sp. nov.
Stn DW 330. — 15.10.1986, 20°19.80'S, 158°48.42'E, 360-365 m : *Nectocarcinus caledonicus* sp. nov.
Stn DW 335. — 15.10.1986, 20°03.24'S, 158°45.35'E, 315 m : *Nectocarcinus caledonicus* sp. nov.
Stn DW 338. — 15.10.1986, 19°51.60'S, 158°44.40'E, 540-580 m : *Nectocarcinus caledonicus* sp. nov.
Stn DW 346. — 17.10.1986, 19°30.77'S, 158°27.07'E, 345-252 m : *Portunus haanii.*
Stn DC 388. — 22.10.1986, 20°45.35'S, 160°53.69'E, 500-510 m : *Parathranites orientalis, Ovalipes iridescens.*
Stn CP 389. — 22.10.1986, 20°44.59'S, 160°53.67'E, 500 m : *Ovalipes iridescens.*

CORAIL 2.

Stn CP 17. — 21.07.1988, 20°48.14'S, 160°57.14'E, 500-500 m : *Ovalipes iridescens.*
Stn DW 162. — 02.09.1988, 19°46.24'S, 158°25.67'E, 208 m : *Portunus haanii.*

Wallis and Futuna Islands

MUSORSTOM 7.

Stn DW 495. — 10.05.1992, 14°18.9'S, 178°03.0'W, 100-110 m : *Portunus dubius.*
Stn CP 498. — 10.05.1992, 14°18.9'S, 178°03.1'W, 105-160 m : *Lupoyclus philippinensis, Thalamita spinifera.*
Stn DW 499. — 10.05.1992, 14°19.6'S, 178°04.6'W, 290-395 m : *Parathranites orientalis.*
Stn DW 500. — 11.05.1992, 14°19.5'S, 178°04.1'W, 350-394 m : *Parathranites orientalis.*
Stn CP 505. — 11.05.1992, 14°19.5'S, 178°04.3'W, 245-400 m : *Parathranites orientalis, Portunus dubius, Thalamita spinifera.*
Stn CP 508. — 11.05.1992, 14°19.5'S, 178°04.5'W, 245-440 m : *Parathranites orientalis, Charybdis (Charybdis) rufodactylus.*
Stn CP 509. — 12.05.1992, 14°14.8'S, 178°11.5'W, 200-240 m: *Portunus dubius.*
Stn CP 515. — 12.05.1992, 14°13.5'S, 178°10.3'W, 224-252 m : *Parathranites orientalis, Thalamita spinifera.*
Stn CP 517. — 12.05.1992, 14°13.4'S, 178°10.4'W, 233-235 m : *Parathranites orientalis.*

Indonesia

KARUBAR. ***Kai Islands.***

Stn DW 02. — 22.10.1991, 05°47'S,132°13'E, 209-240 m : *Parathranites orientalis.*
Stn CP 05. — 22.10.1991, 05°49'S, 132°18'E, 296-299 m : *Ovalipes iridescens.*

Stn CP 06. — 22.10.1991, 05°49'S, 132°21'E, 298-287 m : *Ovalipes iridescens.*
Stn CP 09. — 23.10.1991, 05°23'S, 132°29'E, 368-389 m : *Ovalipes iridescens.*
Stn CP 25. — 26.10.1991, 05°30'S, 132°52'E, 336-346 m : *Ovalipes iridescens.*
Stn DW 30. — 26.10.1991, 05°39'S, 132°56'E, 118-111 m : *Parathranites orientalis.*
Stn DW 32. — 26.10.1991, 05°47'S, 132°51'E, 170-206 m : *Parathranites orientalis.*
Stn CP 33. — 27.10.1991, 06°05'S, 132°38'E, 307-311 m : *Ovalipes iridescens.*
Stn CP 35. — 27.10.1991, 06°08'S, 132°45'E, 390-502 m : *Ovalipes iridescens, Benthochascon hemingi.*
Stn CP 36. — 27.10.1991, 06°05'S, 132°44'E, 268-210 m : *Ovalipes iridescens, Parathranites orientalis.*

Tanimbar Islands.
Stn CP 38. — 28.10.1991, 07°40'S, 132°27'E, 620-666 m : *Charybdis (Charybdis) rosaea.*
Stn CP 39. — 28.10.1991, 07°47'S, 132°26'E, 477-466 m : *Charybdis (Charybdis) rosaea.*
Stn CC 41. — 28.10.1991, 07°45'S, 132°42'E, 401-393 m : *Ovalipes iridescens, Charybdis (Charybdis) rosaea.*
Stn CC 42. — 28.10.1991, 07°53'S, 132°42'E, 354-350 m : *Ovalipes iridescens, Charybdis (Charybdis) rosaea.*
Stn CP 59. — 31.10.1991, 08°20'S, 132°11'E, 405-399 m : *Charybdis (Charybdis) rosaea.*
Stn CP 62. — 01.11.1991, 09°01'S, 131°42'E, 246-253 m : *Charybdis (Gonioneptunus) bimaculata.*
Stn CP 63. — 01.11.1991, 08°00'S, 132°58'E, 215-214 m : *Charybdis (Gonioneptunus) bimaculata.*
Stn CP 65. — 01.11.1991, 09°14'S, 132°27'E, 176-174 m : *Charybdis (Gonioneptunus) bimaculata.*
Stn CP 72. — 02.11.1991, 08°36'S, 131°33'E, 699-676 m : *Charybdis (Charybdis) rosaea.*
Stn CP 82. — 04.11.1991, 09°32'S, 131°02'E, 219-215 m : *Charybdis (Gonioneptunus) bimaculata.*
Stn CP 85. — 04.11.1991, 09°22'S, 131°14'E, 245-240 m : *Ovalipes iridescens.*
Stn CP 86. — 04.11.91991, 09°26'S, 131°13'E, 225 m : *Parathranites orientalis, Charybdis (Gonioneptunus) bimaculata.*

SYSTEMATIC ACCOUNT

Family PORTUNIDAE Rafinesque, 1815

Subfamily CARCININAE MacLeay, 1838

Genus *NECTOCARCINUS* A. Milne Edwards, 1860

Nectocarcinus caledonicus sp. nov.

Figs 1-2, 9 a

MATERIAL EXAMINED. — **New Caledonia**. SMIB 5 : stn DW 96, 245 m : 1 ♀ 9 x 12 mm (MNHN-B 22820).
CHALCAL 2 : stn DW 83, 200 m : 1 ♂ 5.5 x 7.5 mm, left cheliped missing (MNHN-B 22821).
BATHUS 3 : stn DW 828, 318-360 m : 1 ♂ 9 x 13 mm (MNHN-B 22819).
Chesterfield Islands. MUSORSTOM 5 : stn DW 252, 300-310 m : 1 ♂ 12 x 16 mm, first male pleopod figured, photographed (MNHN-B 22816). — Stn DW 330, 360-365 m : 1 ♀ 12 x 16 mm, figured (MHNH-B 22817). — Stn DW 335, 315 m : 1 ♂ 12 x 16 mm, left cheliped missing; 1 ovig. ♀ 9 x 13 mm (MNHN-B 22822). — Stn DW 338, 540-580 m : 1 ♂ 9 x 12 mm, left cheliped missing (MNHN-B 22818).

TYPES. — The male from MUSORSTOM 5, Stn DW 252, 12 x 16 mm (MNHN-B 22816) has been selected as holotype; the other specimens are paratypes.

DESCRIPTION. — Front concave, four lobes; median lobes small, apex rounded, much smaller than laterals, separated by a notch, size about one-third of laterals; lateral lobes large, triangular in shape with pointed apex directed anteriorly; from tip to tip the lateral lobes form a crescent-shaped rostral plate; inner orbital angle separated from lateral lobe by wide sulcus.

Carapace wider than long, sparsely covered with fine granules, surface without distinct ridges, regions clearly defined. Epibranchial region forms almost a straight, raised area reaching near cervical groove; cardiac region with

two raised rounded areas. Anterolateral margin of carapace convex, armed with four teeth : first tooth large and blunt, second to third as sharp spines, about equal in size, fourth larger than two preceding teeth, bearing one or two, small, spine-like teeth at or near its base. Anterolateral and posterolateral margins of carapace covered with hairs.

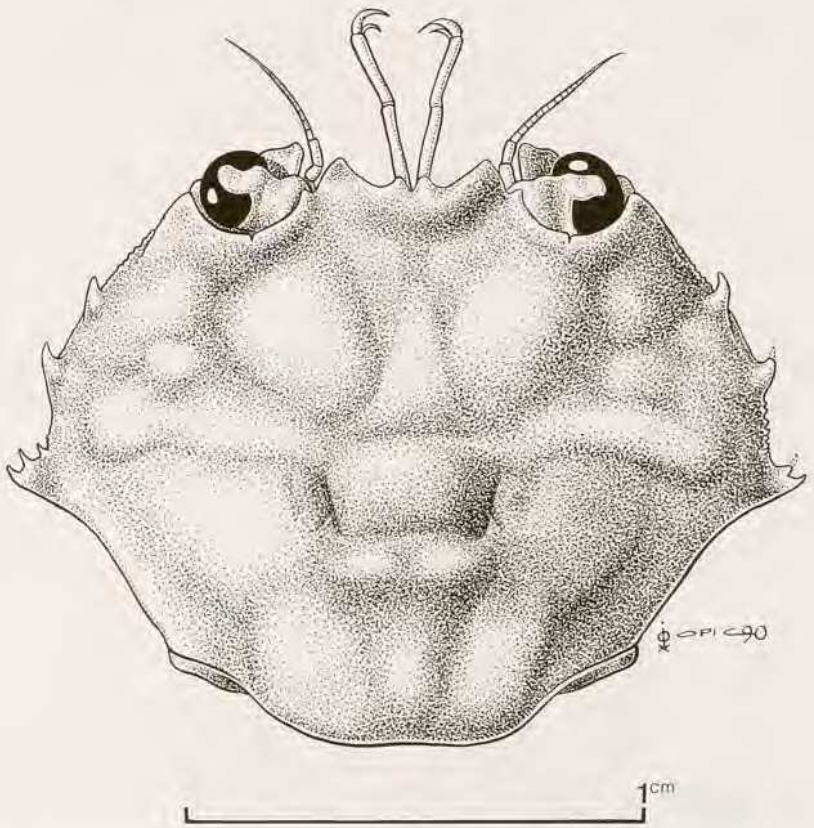

FIG. 1. — *Nectocarcinus caledonicus* sp. nov., ♀ 12 x 16 mm, paratype. Chesterfield Islands, MUSORSTOM 5, stn 330, 360-365 m (MNHN-B 22817).

Chelipeds almost equal in length and size; anterior border of arm granulated, without spine on both margins which are covered with hairs; wrist broad, dorsal surface sparsely granulated, armed with a strong spine on inner angle, which carries a much smaller spine on its inner base forming, outer surface with small spine; palm denticulated, without costa on inner and outer surfaces except on dactylus, inner margin covered with hair; upper surface of hand with spine on distal inner margin.

Second to fourth walking legs granulated, covered with stiff bristles; posterior margin of propodus and dactylus of second to fourth legs pilose, fourth leg carpus also pilose posteriorly, dactylus of each leg longer than propodus. Fifth leg with last two segments flattened; merus finely granulated, not densely pilose, length more than twice width, not armed; margins of propodus pilose; dactylus ovate, about 2.5 times longer than wide, posterior margin pilose, anterior margin with bristles, apex blunt.

Third maxilliped relatively narrow, merus much longer than broad, outer angle not produced anterolaterally; carpus situated mediointernally.

Male abdomen with segments three to five articulated; telson (last segment) heart-shaped, slightly wider than long; penultimate segment parallel in proximal four-fifths, slightly wider than long. Male pleopod stout and almost straight, twisted on its distal two-thirds and turning into a slim slightly curved apex anterolaterally, outer surface of straight part covered with short spinules, which also cover exterior part of apex; second pleopod long and slender, much longer than first, located in groove of first pleopod.

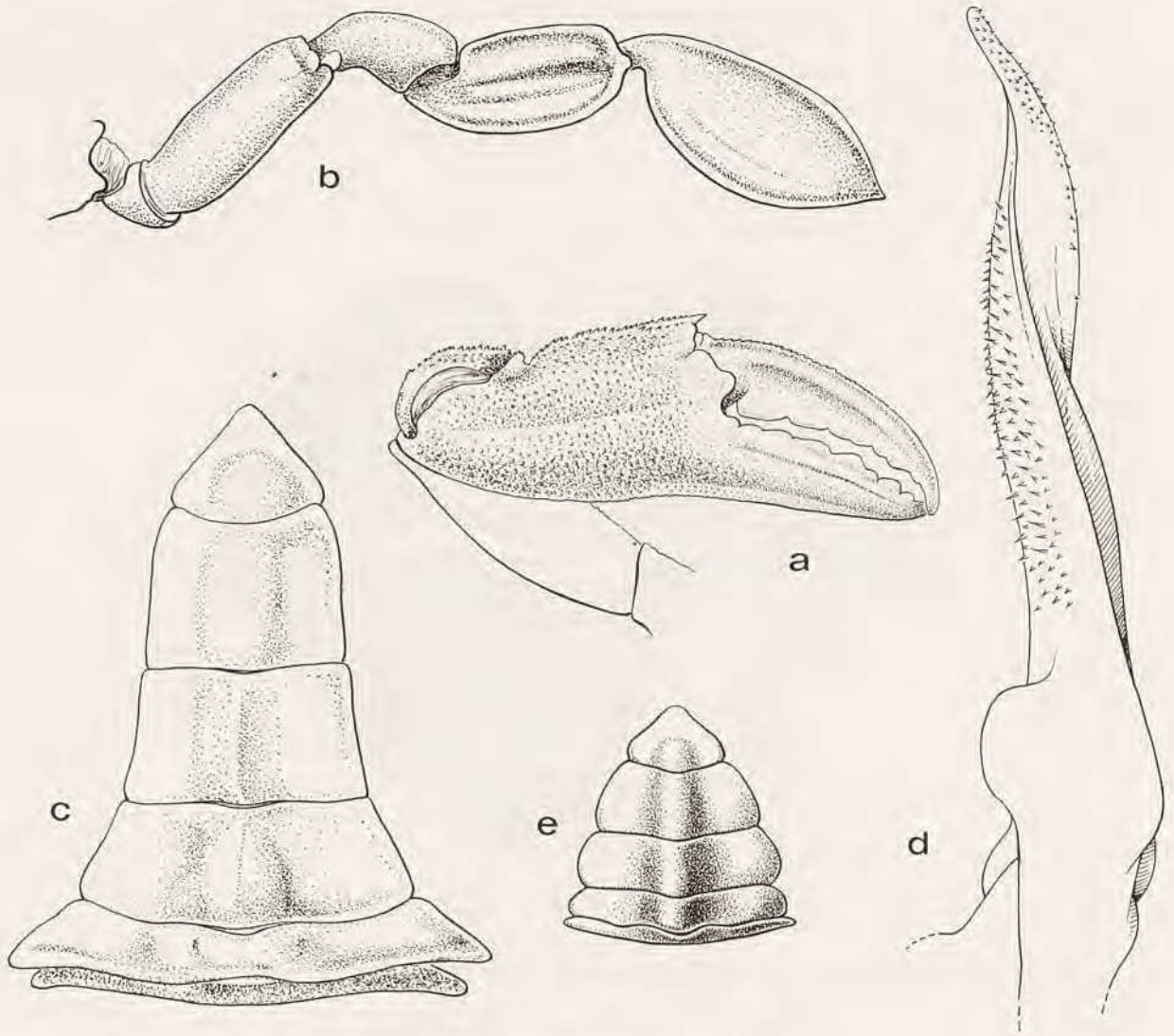

FIG. 2. — *Nectocarcinus caledonicus* sp. nov.

a, ♀ 9 x 12 mm, paratype. New Caledonia, SMIB 5, stn DW 96, 245 m (MNHN-B 22820) : right cheliped.

b-d, ♂ 12 x 16 mm, holotype. Chesterfield Islands, MUSORSTOM 5, stn DW 252, 300-310 m (MNHN-B 22816) : **b**, right fifth pereiopod; **c**, abdomen; **d**, first pleopod.

e, ♀ 12 x 16 mm, paratype. Chesterfield Islands, MUSORSTOM 5, stn DW 330, 360-365 m (MNHN-B 22817) : abdomen.

REMARKS. — *Nectocarcinus caledonicus* sp. nov. differs from *N. spinifrons* Stephenson, 1960, mostly in the general form of the front which is broad in *N. spinifrons*, and the anterolateral teeth of the carapace, which are small and sharp, and not stout as in *N. spinifrons*. *N. integrifrons* (Latreille, 1825), *N. bennettae* Takeda & Miyake, 1969, *N. tuberculosus* A. Milne Edwards, 1860, and *N. antarcticus* (Jacquinot, 1853) share close morphological characters and differ from *N. caledonicus* in general form of the carapace, which is rounder or subquadrate and has a relatively wider posterior margin compared to that of *N. caledonicus*; and the form of anterolateral teeth of carapace, which are teeth rather than spines as in *N. caledonicus*.

N. caledonicus is closest to *N. bullatus* Balss, 1924, a West Atlantic species, in general features, but the two are clearly different. *N. bullatus*, as figured by DELL *et al.* (1970), has a sharper first anterolateral tooth, and the second to fourth teeth are much larger than those of *N. caledonicus*; and the carination of the dorsal surface of the

carapace, which is present in *N. bullatus*, is absent in *N. caledonicus*. The presence of small spine-like teeth on the base of the fourth anterolateral tooth in *N. caledonicus* resembles that of *N. bullatus*, but the latter has small spine-like teeth on more than one anterolateral tooth. The other character approaching *N. bullatus* is the form of the rostrum, in which they are almost alike.

ETYMOLOGY. — The specific name *caledonicus* refers to the distribution of this species in New Caledonian and neighbouring waters.

SIZE. — Males : 9 x 12 - 12 x 16 mm; females : 9 x 13 - 12 x 16 mm.

DISTRIBUTION. — Known only from New Caledonia and Chesterfield Islands, at 200 to 580 m depth.

Nectocarcinus pubescens sp. nov.

Figs 3-4, 9 b-c

MATERIAL EXAMINED. — **New Caledonia.** MUSORSTOM 4 : stn CP 170, 485 m : 1 ♀ 24 x 25 mm, abdomen photographed (MNHN-B 22830). — Stn CP 180, 450 m : 1 ♀ 17.5 x 18 mm (MNHN-B 22831). — Stn CC 201, 500 m : 1 ♂ 25 x 25.5 mm, figured and photographed (MNHN-B 22829).

TYPES. — The male from MUSORSTOM 4, Stn CC 201, 25 x 25.5 mm (MNHN-B 22816) has been selected as holotype; the other specimens are paratypes.

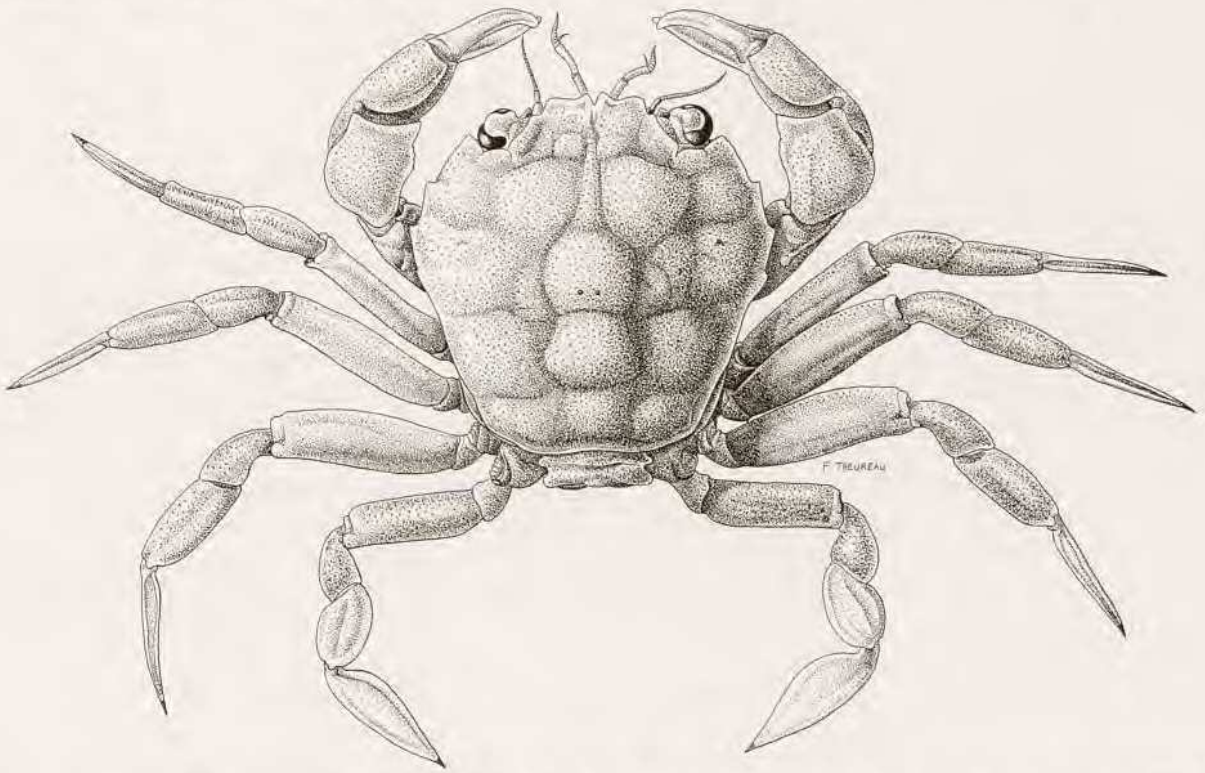

FIG. 3. — *Nectocarcinus pubescens* sp. nov., ♂ 25 x 25.5 mm, holotype. New Caledonia, MUSORSTOM 4, stn CC 201, 500 m (MNHN-B 22829).

DESCRIPTION. — Front flat, with four lobes : median lobes small, more protruding than laterals, apex rounded, directed anteriorly, separated by a wide, deep notch; lateral lobes much broader than medians, width about twice that of the medians and almost flat.

Carapace about as broad as long, granulate, dorsal surface almost entirely covered with granules and short hairs; anterolateral border shorter than posterolateral. Regions of carapace well defined, without any marked carination; metagastric with pair of deep perforations. Anterolateral margin with four teeth, first tooth largest; fourth smallest; second to fourth small and blunt, although second or third tooth may be pointed; in small specimens second and/or third tooth is sharper.

Third maxilliped of moderate size, granulated and covered with hairs; merus longer than broad, not angled anterolaterally.

Basal antennal joint granulate on upper and basal parts, not completely fused with orbit.

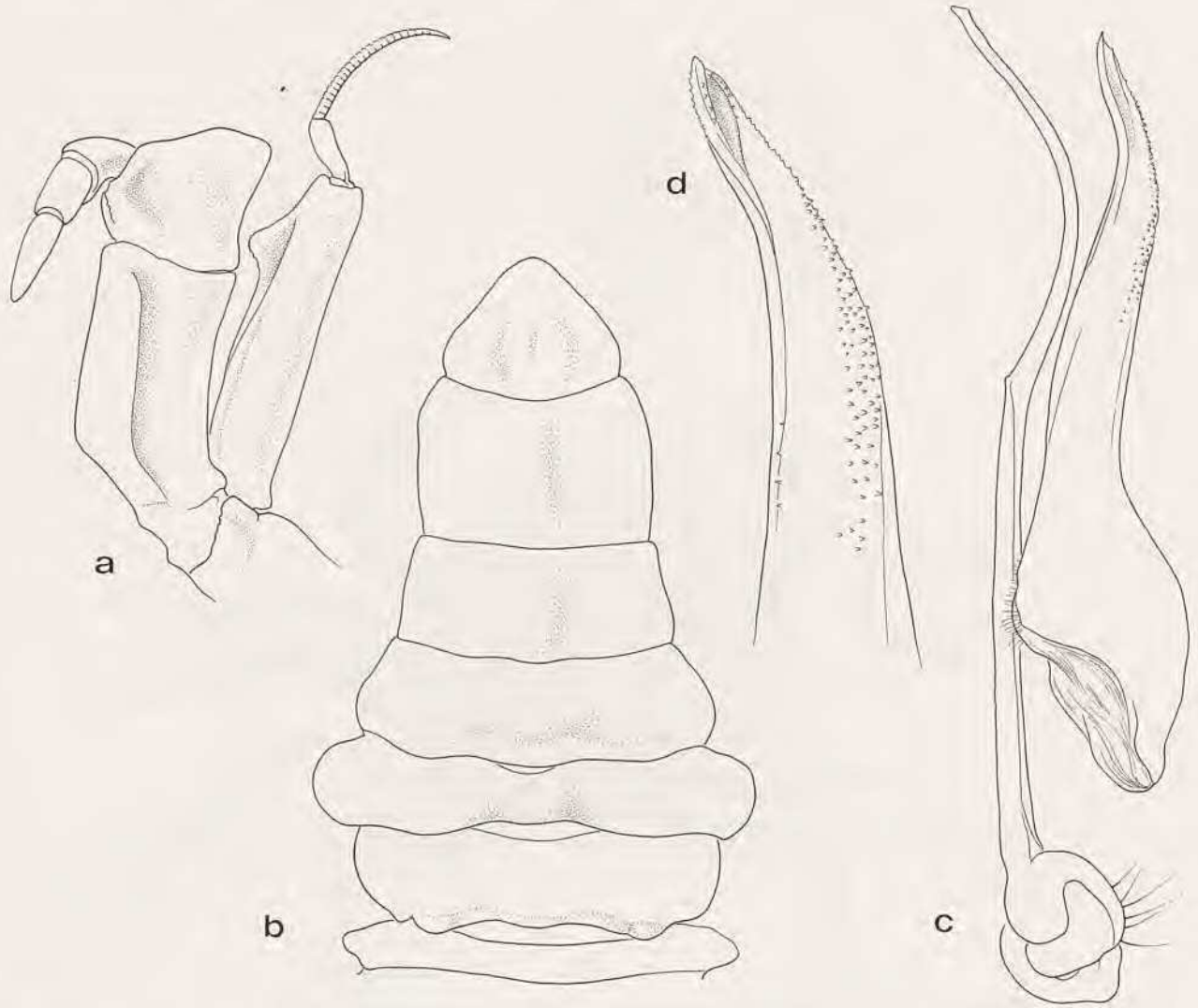

FIG. 4. — *Nectocarcinus pubescens* sp. nov., ♂ 25 x 25.5 mm, holotype. New Caledonia, MUSORSTOM 4, stn CC 201, 500 m (MNHN-B 22829) : **a**, left third maxilliped; **b**, abdomen; **c**, first and second pleopods; **d**, tip of first pleopod.

Chelipeds robust, equal in size, pilose and granulate; arm prismatic, with small spine on anterodistal border; wrist broad with short spine at inner angle; palm granulate and pilose, not costate except on fingers, dorsal surface with small, blunt tooth at distal angle; movable finger moderately curved. Second to third pereiopods granulate and pilose, fourth pereiopod longest; merus of second to fourth pereiopods gradually thickened; dactyl of second to fourth walking legs long and slender, longer than carpus or propodus. Fifth pereiopod natatory; merus long and

slender, about three times longer than wide, unarmed; propodus flattened, with posterior margin strongly curved; dactylus with spiniform apex.

Male abdomen relatively broad; distal segment broader than long, with rounded apex; penultimate segment broader than long, margin straight for two-thirds length and then converging anteriorly. First male pleopod almost straight for two-fifths length, and then concave on inner anterior part, forming an antero-internally directed apex; second male pleopod long and slender, projecting near base of concave part of first pleopod, and much longer than first.

REMARKS. — *Nectocarcinus pubescens* sp. nov. closely resembles *Nectocarcinus spinifrons* Stephenson, 1961. The two species differ in the following characters : 1) *N. pubescens* has less developed anterolateral carapace teeth, these being blunt and short compared to those of *N. spinifrons* which are sharp; 2) the merus of the fifth leg is much narrower in *N. pubescens* than in *N. spinifrons*; 3) the form of the first male pleopod is different : in *spinifrons* it is almost straight over its entire length instead of being curved in its distal part as in *N. pubescens*.

ETYMOLOGY. — The specific name *pubescens* refers to the presence of short hairs covering the animal.

SIZE. — Male : 25 x 25.5 mm; females : 17.5 x 18 - 24 x 25 mm.

DISTRIBUTION. — Known only from New Caledonian waters, in 450 to 550 m depth.

Genus ***BENTHOCHASCON*** Alcock & Anderson, 1899

REMARKS ON THE PLACEMENT OF THE GENUS. — The genus *Benthochascon* is placed in the subfamily Polybiinae by STEPHENSON (1972b), while *Carcinonectes* Stephenson, 1972, is placed in the subfamily Carcininae. DAVIE and SHORT (1989) concluded that *Carcinonectes* Stephenson, 1972, is a junior subjective synonym of *Benthochascon* Alcock & Anderson, 1899, and therefore should be rejected. DAVIE and SHORT (1989) commented that the genus *Benthochascon* may well be more appropriately placed in the Carcininae, where STEPHENSON (1972a) felt his genus *Carcinonectes* should be. On the other hand, STEVCIC (1991) erected the genus *Brusinia* for *Benthochascon elongatum* Sakai, 1969, and a very similar species, *Brusinia brucei*, the latter of which he designated as the type species. STEVCIC (1991) stated that the systematic position of *Brusinia* is unclear; in general body shape it resembles *Portumnus* Leach, 1814, and *Xaiva* MacLeay, 1838. *Portumnus* Leach, 1814, is the type genus of Portumninae Ortmann, 1899, which is a junior synonym of Carcininae MacLeay, 1838 (*fide* HOLTHUIS, 1968). The type genus of Carcininae MacLeay, 1838, is *Carcinus* Leach, 1814. The genera *Carcinus*, *Carcinonectes* (= *Benthochascon*), *Nectocarcinus* and *Xaiva* are correctly placed by STEPHENSON (1972b) in the subfamily Carcininae. STEVCIC (1991 : 130) commented that because of its atypical portunid characters (form of carapace, pereiopods and abdomen), *Brusinia* occupies an isolated position in the systematics of the family Portunidae, with an imprecise subfamilial placement. *Brusinia* Stevcic, 1991, which closely resembles *Xaiva* and *Portumnus*, both members of the Carcininae, is most appropriately placed in the same subfamily, the Carcininae.

Benthochascon hemingi Alcock & Anderson, 1899

Figs 9 d-e

Benthochascon Hemingi Alcock & Anderson, 1899 : 10. — ALCOCK, 1899 : 15-16.
Benthochascon hemingi - ALCOCK & MACGILCHRIST, 1905, pl. 76 fig. 4-4a. — SAKAI, 1976 : 333, pl. 114. — DAVIE & SHORT, 1989 : 183, fig. 14D.
Carcinonectes pacificus Stephenson, 1972a : 129, fig. 3.

MATERIAL EXAMINED. — **New Caledonia**. HALIPRO 1 : stn CP 854, 650-780 m : 1 ♀ 40 x 45 mm, photographed (MNHN-B 22832). — Stn CP 872, 620-700 m : 2 ♂ 40.5 x 46.9, 40.6 x 46 mm; 1 ♀ 29 x 33 mm (MNHN).

"Dana" : st. 3615, 22°30.5'S, 166°26.5'E : ♀ 46.5 x 51 mm, holotype of *Carcinonectes pacificus*, Zoologisk Museum, Copenhagen, cat. Cru. 1022.

Indonesia. KARUBAR : stn CP 35, 390-502 m : 1 ♂ 41 x 45 mm (POLIPI).

REMARKS. — The specimens agree in most characters with the description by ALCOCK and ANDERSON (1899). The chelipeds are robust and subequal in size; upper edge of hand with a blunt tooth only on the smaller chelipeds of all the specimens, whereas on the large cheliped it is only represented by a blunt expansion of the angle. Propodus of fifth leg with strongly curved posterior margin, dactylus with apex spiniform. First male pleopod stout, straight in its distal half, with apex tapering, directed anteriorly. The description and figure of STEPHENSON (1972a) for *Carcininectes pacificus* agree with the present specimens. DAVIE and SHORT (1989) figured a specimen which is identical with the present specimens, and synonymized *Carcinonectes pacificus* with *Benthochascon hemingi*. Comparing the New Caledonian and Indonesian specimens with the holotype of *Carcinonectes pacificus*, a female of 46.5 x 51 mm, I consider them all identical.

DISTRIBUTION. — *Benthochascon hemingi* was reported from the Andaman Sea (ALCOCK & ANDERSON, 1899) from about 330 m (185 fms) deep, and Tosa Bay, Japan (SAKAI, 1976). The species has been reported from New Caledonia by STEPHENSON (1972) but was not known from Indonesian waters. DAVIE and SHORT (1989) reported the species from southern Queensland, where it was collected at depths of 410 to 568 m. One of the present records (650-780 m) is the deepest ever reported.

Genus ***BRUSINIA*** Stevcic, 1991

Brusinia profunda sp. nov.

Figs 5 a-d, 10 a-b

MATERIAL EXAMINED. — **New Caledonia**. MUSORSTOM 4 : stn CP 192, 320 m : 1 ♂ 14 x 11 mm, first male pleopod and entire animal figured (MNHN-B 22823); 1 ♂ 13 x 10 mm (MNHN-B 22826); 1 ♂ 13 x 11 mm, photographed (MNHN-B 22824).

SMIB 6 : stn DW 117, 290 m : 1 ♂ 7 x 6 mm (MNHN-B 22828).

Loyalty Islands. VOLSMAR : stn DW 42, 340-400 m : 1 ♂ 9 x 7 mm; a damaged ♀ (MNHN-B 22825).

Chesterfield Islands. MUSORSTOM 5 : stn DW 328, 355-340 m : 1 ♂ 7 x 5 mm (MNHN-B 22827).

TYPES. — The male from MUSORSTOM 4, Stn CP 192, 14 x 11 mm (MNHN-B 22823) has been selected as the holotype; the other specimens are paratypes, the damaged female from VOLSMAR, Stn DW 42 excepted.

DESCRIPTION. — Carapace oblong, 1.2 to 1.3 times as long as broad; dorsal surface smooth and glabrous; regions very poorly defined, cervical groove can be traced; anterolateral margin shorter than posterolateral; posterior border short, about same length as front. Front wide, with three lobes : median lobe smaller than laterals, not reaching beyond laterals, and directed anteriorly; lateral lobes with blunt apex, directed anterolaterally. Orbit semicircular, dorsal margin entire, without dorsal fissure. Anterolateral margin of carapace with two teeth, second tooth small, resembling a tubercle in male holotype, either a small, distinct or obscure, tooth in other specimens.

Third maxilliped of moderate size; merus broader than long, antero-external angle produced laterally, carpus situated anterointernally.

Chelipeds robust, almost equal in size; merus prismatic; carpus broad, with large short spine, resembling a tooth, at inner angle; palm broad and short, anterior inner ridge terminates in a tubercle; movable finger strongly curved; immovable finger with four to five broad teeth on inner side. Second to fourth pereiopods relatively stout, fourth the longest; merus and propodus of second to fourth pereiopods gradually thickened; dactylus lanceolate, longer than propodus; anterior surface of merus of second and third legs granulated and hairy, propodus and dactylus smooth, almost without hair; anterior surface of merus of fourth leg granulated and hairy, carpus sparsely hairy on its anterior surface. Fifth pereiopod natatory; merus long and slender, about three times as long as wide, unarmed, anterior surface with small granules and sparsely hairy; carpus almost flattened, hairy anteriorly; propodus broad

and flattened, relatively thick, with strongly-curved posterior margin, both margins with thick hairs; dactylus with rounded tip, setose only on posterior margin.

Abdomen of male with segments three to five articulated, not fused; ultimate segment triangular, breadth almost equal to length; penultimate segment longer than broad, parallel over distal half; fifth and fourth segments gradually shorter. First male pleopod straight, slightly twisted anteriorly, outer anterior surface ornamented with short spinules, apex slightly curved internally.

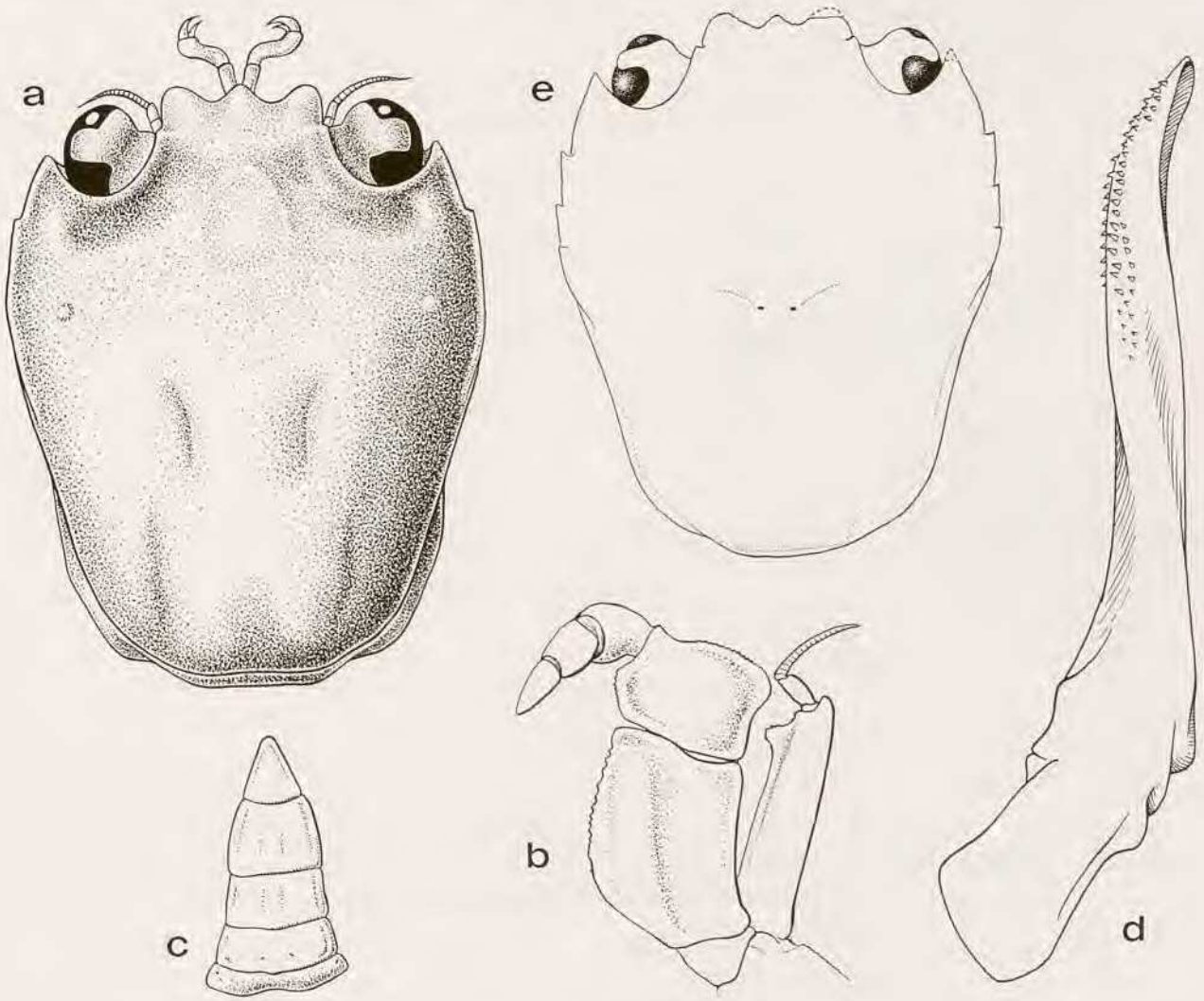

FIG. 5 a-d. — *Brusinia profunda* sp. nov., ♂ 14 x 11 mm, holotype. New Caledonia, MUSORSTOM 4, stn CP 192, 320 m (MNHN-B 22823) : **a**, carapace; **b**, left third maxilliped; **c**, abdomen; **d**, first pleopod.

FIG. 5 e. — *Brusinia elongatum* (Sakai, 1969), ♂ 6.8 x 5.5 mm, holotype. Japan, Izu-Niijima Island (USNM).

REMARKS. — *Brusinia profunda* sp. nov. differs from the two other species of the genus, *B. elongata* (Sakai, 1969) and *B. brucei* Stevcic, 1991, mostly in the number of anterolateral teeth of the carapace and the less pilose last two segments of the fifth walking legs. The three species share the same rostral lobulation as well as the oblong and glabrous carapace. The type specimen of *B. elongata*, which is deposited in the USNM, was examined and is figured here for comparison (fig. 5e). *B. elongata* and *B. brucei* have four anterolateral teeth, whereas *B. profunda* has only one or two. STEVCIC (1991) figured the first male pleopods of *B. elongata* and *B. brucei*

both of which are different from the first male pleopod of *B. profunda*. *B. elongata* and *B. brucei* inhabit much shallower water - 35 to 50 m for *B. elongata* (SAKAI, 1975) and 80 m for *B. brucei* (STEVCIC, 1991) - while *B. profunda* inhabits much deeper waters, 290 to 355 m.

ETYMOLOGY. — The specific name *profunda* refers to the presence of this species in much deeper waters than the other known species of the genus.

DISTRIBUTION. — Known only from the deep waters around New Caledonia, Loyalty and Chesterfield Islands, at 290 to at least 340 m (perhaps 400 m) depth.

Subfamily POLYBIINAE Ortmann, 1893

Genus *OVALIPES* Rathbun, 1898

Ovalipes iridescens (Miers, 1886)

Platyonychus iridescens Miers, 1886 : 202, pl. 17 fig. 2.
Ovalipes iridescens - STEPHENSON & REES, 1968b : 235, figs 1G, 2F, 3F, 4F; pls 36D, 40A, 41A, 42G. — CROSNIER & THOMASSIN, 1974 : 1098, fig. 1. — SPIRIDONOV, 1994 : 129. — ZARENKOV, 1994 : 117, pl. 3 fig. 13-14.

MATERIAL EXAMINED. — **New Caledonia**. MUSORSTOM 4 : stn CP 170, 485 m : 5 ex. — Stn CP 171, 435 m : 6 ex. — Stn CP 178, 520 m : 5 ex. — Stn CP 179, 480 m : 9 ex. — Stn CP 180, 450 m : 7 ex. — Stn CP 200, 545 m : 1 ex. — Stn CC 201, 500 m : 7 ex. — Stn CC 202, 580 m : 7 ex. — Stn CP 236, 495-550 m : 1 ex.
SMIB 2 : stn DW 21, 500 m : 1 ex.
AZTÈQUE : stn 10, 355 m : 2 ex.
Loyalty Islands. MUSORSTOM 6 : stn DW 412, 437 m : 1 ex. — Stn CP 464, 430 m : 4 ex. — Stn CP 465, 480 m : 13 ex. — Stn CP 466, 540 m : 2 ex. — Stn CP 467, 575 m : 5 ex. — Stn CC 470, 560 m : 2 ex. — Stn DW 487, 500 m : 1 ex.
Chesterfield Islands. MUSORSTOM 5 : stn DC 388, 500-510 m : 1 ex. — Stn CP 389, 500 m : 5 ex.
CORAIL 2 : stn DW 17, 500 m : 2 ex.
Indonesia. KARUBAR. *Kai Islands* : stn CP 05, 296-299 m : 20 ex. — Stn CP 06, 298-287 m : 22 ex. — Stn CP 09, 368-389 m : 1 ex. — Stn CP 25, 336-346 m : 1 ex. — Stn CP 33, 307-311 m : 1 ex. — Stn CP 35, 390-502 m : 3 ex. — Stn CP 36, 268-210 m : 1 ex.
Tanimbar Islands : stn CC 41, 401-393 m : 8 ex. — Stn CC 42, 354-350 m : 3 ex. — Stn CP 85, 245-240 m : 4 ex.

SIZE. — Males : 13 x 15 - 70 x 87 mm; females : 14 x 16 - 55 x 69 mm.

DISTRIBUTION. — Known from South Africa to Indonesia, Japan and Australia (STEPHENSON & REES, 1968b). This species has not been previously reported from New Caledonian and neighbouring waters. CROSNIER and THOMASSIN (1974) reported the presence of this species off Madagascar at 480 to 520 m depth. The deepest record is 650-665 as reported by ZARENKOV (1994).

Genus *PARATHRANITES* Miers, 1886

Parathranites orientalis Miers, 1886

Lupocyclus (Parathranites) orientalis Miers, 1886 : 186, pl. 17 figs 1, 1a-c.
Parathranites orientalis - STEPHENSON, 1961 : 97, figs 1B, 2H, pl. 1 fig. 2; 1972b : 6, 24. — CROSNIER, 1962 : 22, fig. 24. — CROSNIER & THOMASSIN, 1974 : 1098. — DAVIE & SHORT, 1989 : 184.

MATERIAL EXAMINED. — **New Caledonia**. *"VAUBAN"* DREDGINGS 1978-1979 : Dredge 3, 390 m : 2 ex. — Dredge 4, 400 m : 2 ex.
BIOCAL : stn CP 84, 210-150 m : 5 ex. — Stn CP 110, 275-320 : 1 ex.
LAGON : stn DW 1153, 330 m : 1 ex.

MUSORSTOM 4 : stn CP 171, 435 m : 2 ex. — Stn CP 172, 275-330 m : 2 ex. — Stn CC 173, 250-290 m : 3 ex. — Stn DW 181, 355 m : 1 ex. — Stn CP 192, 320 m : 1 ex. — Stn CC 248, 380-385 m : 1 ex.

SMIB 5 : stn DW 96, 245 m : 1 ex.

SMIB 6 : stn DW 107, 205 m : 1 ex. — Stn DW 126, 330 m : 3 ex. — Stn DW 137, 330 m : 1 ex.

Chesterfield Islands. CHALCAL 1 : stn CP 10, 225 m : 1 ex.

MUSORSTOM 5 : stn CP 268, 280 m : 1 ex. — Stn CP 276, 269-258 m : 2 ex. — Stn DW 282, 226-230 m : 1 ex. — Stn DW 284, 225-230 m : 3 ex. — Stn DW 285, 245-255 m : 1 ex. — Stn CP 288, 270 m : 1 ex. — Stn CP 289, 273 m : 2 ex. — Stn CP 309, 340 m : 1 ex. — Stn DC 388, 500-510 m : 1 ex.

Loyalty Islands. MUSORSTOM 6 : stn DW 391, 390 m : 1 ex. — Stn DW 397, 380 m : 3 ex. — Stn DW 398, 370 m : 1 ex. — Stn DW 399, 282 m : 1 ex. — Stn DW 406, 373 m : 3 ex. — Stn DW 407, 380 m : 1 ex. — Stn DW 411, 424 m : 3 ex. — Stn DW 413, 463 m : 1 ex. — Stn CP 415, 461 m : 2 ex. — Stn DW 417, 283 m : 4 ex. — Stn DW 418, 283 m : 3 ex. — Stn DW 422, 257 m : 1 ex. — Stn DW 423, 280 m : 1 ex. — Stn DW 428, 420 m : 1 ex. — Stn DW 453, 250 m : 1 ex. — Stn CP 455, 260 m : 3 ex. — Stn DW 456, 240 m : 1 ex. — Stn DW 457, 353 m : 3 ex. — Stn DW 458, 400 m : 1 ex. — Stn DW 461, 240 m : 2 ex. — Stn CP 464, 430 m : 3 ex. — Stn DW 479, 310 m : 1 ex. — Stn DW 480, 380 m : 3 ex.

Mathew and Hunter Islands. VOLSMAR : stn DW 16, 500 m : 1 ex.

Vanuatu. MUSORSTOM 8 : stn CP 963, 400-440 m : 1 ex. — Stn CP 1017, 294-295 m : 1 ex. — Stn CP 1071, 180-191 m : 1 ex.

Wallis and Futuna Islands. MUSORSTOM 7 : stn DW 499, 290-395 m : 4 ex. — Stn DW 500, 350-394 m : 1 ex. — Stn CP 505, 205-400 m : 3 ex. — Stn CP 508, 245-440 m : 3 ex. — Stn CP 515, 224-252 m : 2 ex. — Stn CP 517, 233-235 m : 2 ex.

Indonesia. KARUBAR. *Kai Islands* : stn DW 02, 209-240 m : 1 ex. — Stn DW 30, 118-111 m : 2 ex. — Stn DW 32, 170-206 m : 1 ex. — Stn CP 36, 268-210 m : 1 ex. — *Tanimbar Islands* : stn CP 86, 225-223 m : 1 ex.

SIZE. — Males : 19x 13 - 25 x 17 mm; females : 19 x 13 - 33 x 24 mm.

DISTRIBUTION. — Widely distributed in the Indo-West Pacific and reported from East African waters to India, Japan, Australia and Admiralty Islands (STEPHENSON, 1972b), down to a depth of 400 meters. The present records are new for New Caledonian and neighbouring waters, as well as for Vanuatu and the Wallis and Futuna Islands. CROSNIER and THOMASSIN (1974) reported this species from off Madagascar in depths ranging from 245 to 460 m. The depths recorded here include the deepest ever reported (510 m).

Genus ***LISSOCARCINUS*** Adams & White, 1849

Lissocarcinus polybioides Adams & White, 1849

Lissocarcinus polybioides Adams & White, 1849 : 46, pl. 11 fig. 5. — LEENE, 1938 : 8; 1940 : 164. — STEPHENSON & CAMPBELL, 1960 : 94, figs 1F, 2H; pl. 3 fig. 1; pl. 5H. — STEPHENSON, 1972b : 8, 28.

MATERIAL EXAMINED. — **New Caledonia**. MUSORSTOM 4 : stn DW 186, 205 m : 1 ♀ 11 x 11 mm.
Vanuatu. MUSORSTOM 8 : stn CP 1103, 165-163 m : 1 ♀ ov. 15 x 16 mm.

DISTRIBUTION. — This species has a wide distribution in the Indo-West Pacific and has been reported from East African waters to India, Indonesia, Philippines, Japan and Australia, ranging from the intertidal zone to 200 meters depth (STEPHENSON, 1972b). This is the first record from New Caledonia and Vanuatu.

Subfamily PORTUNINAE Rafinesque, 1815

Genus ***CHARYBDIS*** de Haan, 1833

Charybdis (Charybdis) rosaea (Hombron & Jacquinot, 1846)

Figs 6, 10 c-d

Thalamita rosaeum Hombron & Jacquinot, 1846, Atlas, pl. 5 figs 11-15. — LUCAS, 1853 : 55.
Goniosoma rosaeum - A. MILNE EDWARDS, 1861 : 378.
Charybdis (Charybdis) rosaea, LEENE, 1938 : 43, fig. 14. — STEPHENSON, 1972b : 11 (key), 34.

MATERIAL EXAMINED. — **Indonesia**. KARUBAR. *Kai Islands* : stn CP 38, 620-666 m : 1 ♂ 18.6 x 24 mm, 1 ♀ 19.8 x 25.8 mm (USNM). — Stn CP 39, 477-466 m : 1 ♀ 15.2 x 19.8 mm.

Tanimbar Islands : stn CC 41, 401-393 m : 4 ♂ 14.2 x 19.8 - 21 x 26.6 mm, 2 ♀ 14 x 19 mm - 13.8 x 18.6 mm (POLIPI). — Stn CC 42, 354-350 m : 5 ♂ 20 x 26 - 30 x 37 mm; 1 ♀ 20 x 26 mm; 1 ♂ 34 x 42 mm, first pleopod figured (MNHN-B 22833); 1 ♀ 20 x 26.5 mm, photographed (MNHN-B 22834). — Stn CP 59, 405-399 m : 1 ♀ 13.8 x 17.6 mm. — Stn CP 72, 699-676 m : 1 ♂ 20 x 25 mm (abdomen figured).

New Guinea : 1 ♀ 33 x 40 mm, preserved dry (MNHN-B 787).

TYPE. — The female (MNHN-B 787), preserved dry in the MNHN Paris, is the specimen used by JACQUINOT for figuring the species. It is here identified as the holotype.

OBSERVATIONS ON THE TYPE SPECIMEN. — The median dorsal part of the carapace is broken, a portion of the broken part having fallen inside the body; cracks extend towards the left lateral frontal lobes, backwards to the middle of the posterior margin, and leftwards to between the third and fourth anterolateral teeth. The first and second right anterolateral teeth have the tip broken. On the broken fragment the cervical groove is still clearly visible. The tips of the dactyli of the fifth legs are cut and the fourth right leg is missing, as figured by LEENE (1938, fig. 14), being no longer entire and complete, as in the original figure of JACQUINOT. The dactyli of the fourth left leg and the fifth right leg are detached and kept in a tube.

DIAGNOSIS. — Carapace almost rounded, slightly broader than long. Merus of third maxilliped as long as broad, antero-external angle moderately produced laterally. Male abdomen with segments three to five fused; telson triangular with rounded apex, broader than long; penultimate segment converging anteriorly. First male pleopod sharply bent outward.

SIZE. — Males : 14 x 19 - 34 x 42 mm; females : 13.8 x 18.6 - 33 x 40 mm.

REMARKS. — Observations on the KARUBAR specimens and the type specimen revealed that LEENE (1938) omitted to figure the frontal ridge on the carapace. This ridge was not mentioned in either the original description by LUCAS (1853) or by A. MILNE EDWARDS (1861), and was not even shown in the original figure of JACQUINOT (pl. 5, fig. 11). The dry type specimen has a clear, short frontal ridge on the fragment of the region which has fallen into the abdominal cavity. All the KARUBAR specimens are dark brown in colour; they agree with the detailed description of LEENE (1938).

DISTRIBUTION. — *Charybdis* (*Charybdis*) *rosaea* was only known from the type specimen, identified here as the holotype, collected off the coast of New Guinea. The KARUBAR specimens have been caught during hauls in 350 to 676-699 m depth, but these depths are probably not those at which the species lives. Very likely the specimens were caught while the trawl was being brought up to the surface. The type was probably collected by hand picking (J. FOREST, pers. comm.).

REMARKS ON AUTHORSHIP. — The authorship of *Charybdis* (*Charybdsi*) *rosaea* is cited as Hombron & Jacquinot, 1853, by A. MILNE EDWARDS (1861), LEENE (1938) and STEPHENSON (1972b). According to LUCAS (1853 : 4, footnote) : " Les genres et les espèces portant une † sont décrits pour la première fois dans ce travail; ils ont été presque tous créés par M.H. JACQUINOT et figurés par lui dans l'Atlas, à l'exception du *Sesarma gracilipes*, qui appartient à M. Milne Edwards, et des *Chlorodius Hombronii*,- *Etisus macrodactylus*,- *Galene hirtipes*,- *Galene laevimanus* qui appartiennent à M.H. Lucas." *Thalamita rosaea* was indicated by † and not mentioned in the footnote, therefore it was created and figured by JACQUINOT, but nothing is mentioned in the Atlas so it seems correct to leave HOMBRON and JACQUINOT as the authors of this species. The exact date of the publication of plate 5 could not be found. In the "Bibliographie de France", the forthcoming atlas is mentioned for the first time in 1841 (under n°5963) and it is indicated that the Atlas would be published in issues of 5 or 6 plates each; in 1842 (under n°2074) it is mentioned that 4 issues of plates were available (but no subject and no number of plates are indicated); in 1844 (under n°4486) it is mentioned that 8 issues of plates of Zoology are available (again without any number for the plates available); in 1846 (issue of 19th September, under n°4371), the whole Zoology part of the Atlas, by HOMBRON and JACQUINOT, is mentioned as being available in 2 volumes and 51 plates. Hence it seems that the species have to be dated as 1846.

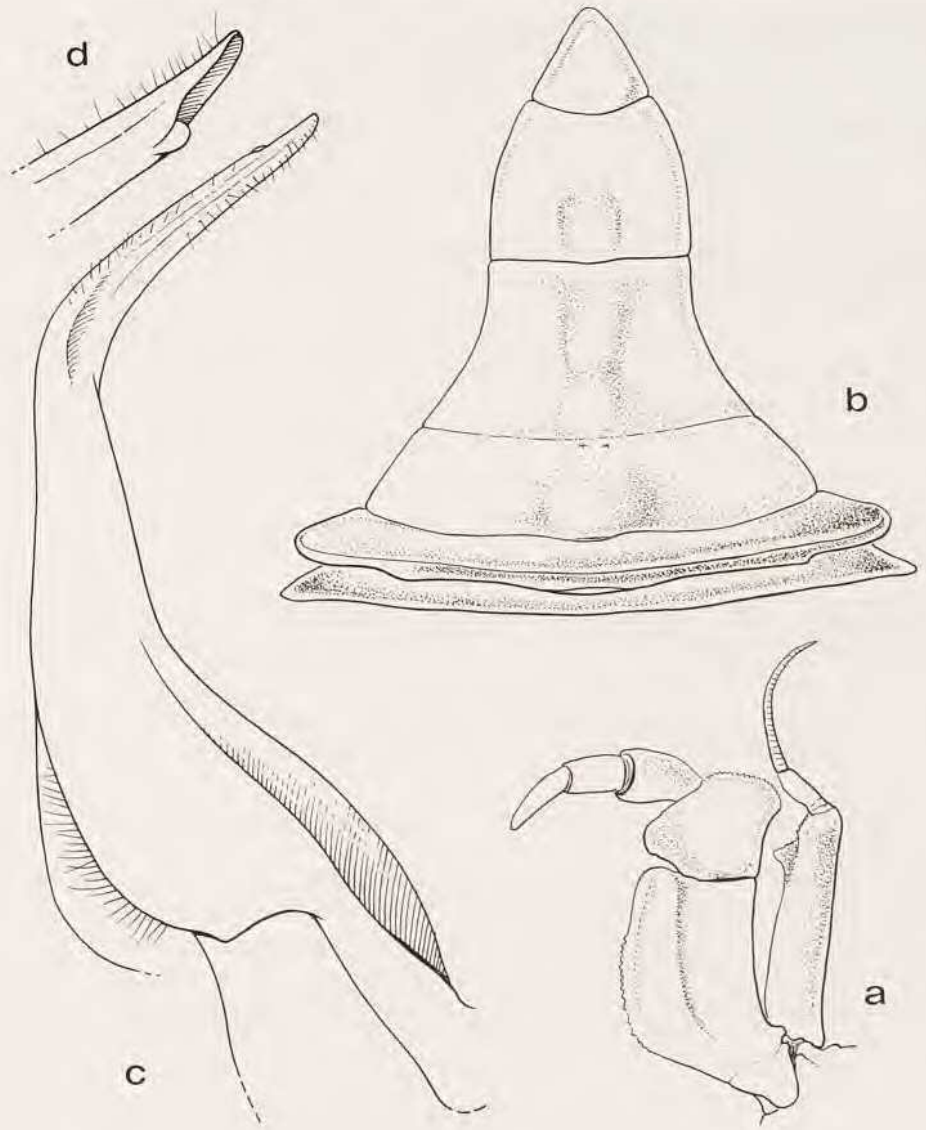

FIG. 6. — *Charybdis (Charybdis) rosaea* (Hombron & Jacquinot, 1846)

a-b, ♂ 20 x 25 mm. Indonésie, KARUBAR, stn CP 72, 699-676 m : **a**, left third maxilliped; **b**, abdomen.

c, ♂ 34 x 42 mm. Indonésie, KARUBAR, stn CC 42, 354-350 m (MNHN-B 22833) : **c**, first pleopod; **d**, tip of first pleopod.

Charybdis (*Charybdis*) *rufodactylus* Stephenson & Rees, 1968

Charybdis (*Charybdis*) *rufodactylus* Stephenson & Rees, 1968a : 102, figs 1D, 1H, 2F; pl. 12D. — STEPHENSON, 1972b : 11, 34.

MATERIAL EXAMINED. — **New Caledonia**. West coast, coupée de l'Alliance, 260 m : 1 ♂ 68 x 101 mm. — No other data : 1 ex. — Tombo reef, trap, 200 m : 1 ex. — External slope, in front of Tombo reef, 200-250 m : 1 ex. — 200 m, 4.09.1978, no other data, M. TÜRKAY det. : 1 ♂ 57 x 80 mm. — Ile des Pins, trap, 100-150 m : 2 ex.

CALSUB : stn PL 18, 200-300 m : 1 ♂ 58 x 84 mm.

SMIB 6 : stn DW 130, 230 m : 1 ex.

HALIPRO 1 : stn CP 851, 314-364 m ; 1 ♂ 57 x 82 mm. — Stn CP 852, 266-750 m : 1 ex. — Stn 855, 204-220 m : 2 ex. — Stn CP 856, 311-65 m : 1 ex., chelipeds missing.

Loyalty Islands. MUSORSTOM 6 : stn DW 423, 280 m : 1 ex.
Vanuatu. MUSORSTOM 8 : stn CP 1036, 920-950 m : 1 ex.
Wallis and Futuna Islands. MUSORSTOM 7 : stn CP 508, 245-440 m : 1 ♂ 51 x 77 mm. — Stn CP 515, 224-252 m : 2 young ex.
French Polynesia. *Society Islands* : Tahiti (Vairao), 70-270 m, CNEXO coll., Oct. 1978 : 1 ex.

REMARKS. — *Charybdis* (*Charybdis*) *rufodactylus* closely resembles *Charybdis* (*Charybdis*) *miles*. The two species are easy to separate by the presence of squamiform marking on the ventral surface of the cheliped in *C. miles*. The smaller specimens of the present material have blunter rostral lobes than those of the larger specimens and, moreover, the first anterolateral tooth of the carapace is not very truncated.

DISTRIBUTION. — *Charybdis* (*Charybdis*) *rufodactylus* has not been reported before from the areas mentioned in the list of Material examined above. The species was known with certainty from about 100 m to at least 314 m. The type specimen was collected from off Cape Moreton, southern Queensland, at a depth of about 180 m (100 fms). The present depth, 920-950 m, if not a mistake, extends the species' depth range considerably.

Charybdis (*Gonioneptunus*) *bimaculata* (Miers, 1886)

Goniosoma variegatum var. *bimaculatum* Miers, 1886 : 191, pl. 15 fig. 3.
Charybdis (Gonioneptunus) bimaculata - SHEN, 1932 : 81, textfigs 46-47, pl. 4 fig. 3. — LEENE, 1938 : 126, textfigs 70-71. — STEPHENSON, HUDSON & CAMPBELL, 1957 : 504, figs 2J, 3K, pl. 3 fig. 4, pls 4H, 5A. — STEPHENSON, 1972b : 36. — CROSNIER & THOMASSIN, 1974 : 1111, fig. 6 d. — DAVIE & SHORT, 1989 : 183.

MATERIAL EXAMINED. — **Indonesia**. KARUBAR. *Tanimbar Islands* : stn CP 62, 246-253 m : 2 ex. — Stn CP 63, 215-214 m : 6 ex. — Stn CP 65, 176-174 m : 3 ex. — Stn CP 82, 219-215 m : 4 ex. — Stn CP 86, 225-223 m : 15 ex.

SIZE. — Males : 20 x 30 - 32 x 47 mm; females : 15 x 22 - 29 x 44 mm.

DISTRIBUTION. — This species has a wide distribution in the Indo-West Pacific and was reported from several regions including East African waters, India, Philippines, Japan, and Australia. In Indonesian waters it has been reported from Sunda Strait, Madura Strait and Kei Islands at depths ranging from 47 to 275 m (STEPHENSON, 1972b). CROSNIER and THOMASSIN (1974) reported this species from off Madagascar at 150 to 250 m depth; DAVIE and SHORT (1989) recorded it from southern Queensland at 240 to 261 m depth.

Genus *LUPOCYCLUS* Adams & White, 1849

Lupocyclus philippinensis Semper, 1880

Lupocyclus philippinensis Semper, 1880 : 68.
Lupocyclus philippinensis - LEENE, 1938 : 11 (part); 1940 : 174, fig. 5, pl. 3. — STEPHENSON & CAMPBELL, 1960 : 40. — CROSNIER, 1962 : 40, figs 54-57. — MOOSA, 1981b : 146, fig. 1.
Lupocyclus Philippinensis - YU, 1975 : 70, fig. 21.

MATERIAL EXAMINED. — **New Caledonia**. HALIPRO 1 : stn CP 863, 190-227 m : 1 ♂ 14 x 18 mm.
Vanuatu. MUSORSTOM 8 : stn CP 1086, 182-215 m : 1 ♂ 12 x 15 mm.
Wallis and Futuna Islands. MUSORSTOM 7 : stn DW 498, 105-160 m : 1 ♀ 5 x 6.5 mm.

REMARKS. — The male specimen is without chelipeds and the right second and fifth legs are missing. It can be recognized as *L. philippinensis* especially by the character of the first male pleopod, the presence of six main anterolateral teeth and the slender merus of the fifth walking legs. The male specimen has the first male pleopod with the apex curved inward, which agrees with LEENE's figure (1940, fig. 5). LEENE's figured specimen (1940, pl. 3) has the dactylus of the fifth walking leg with a rounded apex; SAKAI (1939, pl. 80 fig. 3; 1976, text-fig. 191) figured a specimen with a spiniform apex. The present specimens have the dactylus of the fifth walking legs with a spiniform apex. The small female specimen is a juvenile, herewith identified as

L. philippinensis mostly by having the fifth walking legs with a slender merus and the chelipeds with a long, slender merus; the merus of the chelipeds is armed with five spines on the anterior border and a spine on the posterior border; the wrist has a spine at its inner angle and one on the outer margin; the hand bears three spines including that situated near the joint with the wrist. Anterolateral border of the carapace has five teeth, and epibranchial, metagastric and protogastric ridges are distinct. The carination of the carapace is similar to that of *L. rotundatus*.

DISTRIBUTION. — This species has not been reported before from New Caledonia, Vanuatu or the Wallis and Futuna Islands. It was previously known from several localities ranging from the Arabian Sea to Japan and Australia (see MOOSA, 1981b) and was recorded in the Philippines from depths of 100 to 189 m. One of the present records (190-227 m) is the deepest ever reported.

Lupocyclus tugelae Barnard, 1950

Lupocyclus tugelae Barnard, 1950 : 148, fig. 29e-h. — STEPHENSON, 1961 : 103, figs 1E, 3C, pl. 2 fig. 1; 1972b : 9, 37.

MATERIAL EXAMINED. — **New Caledonia**. LAGON : stn DW 933, 100 m : 3 ex. — Stn CP 1062, 300-320 m : 1 ex.

DISTRIBUTION. — This species has a wide distribution, having been reported from East Africa (BARNARD, 1950 : off the mouth of Tugela River, 65 m; STEPHENSON, 1972a : off Mombasa, 53 m), the Red Sea and Gulf of Aden (SPIRIDONOV, 1994), Philippines (STEPHENSON, 1972a : off Jolo, 50 m; MOOSA, 1981b : 107-96 m), Indonesia (STEPHENSON, 1972a : Amboina Bay, 14-20 m, 100-140 m) and several localities in Australia at 40 to 66 m deep (STEPHENSON, 1961a). The present records are new for New Caledonia and one (300-320 m) is the deepest ever reported.

Genus ***PORTUNUS*** Weber, 1795

Portunus dubius (Laurie, 1906)

Neptunus (Achelous) dubia Laurie, 1906 : 416, fig. 9.
Portunus dubius - STEPHENSON & REES, 1967 : 20, fig. 3, pl. 2A. — CROSNIER, 1984 : 33, fig. 1.

MATERIAL EXAMINED. — **New Caledonia**. LAGON : stn DW 367, 105 m : 1 ex.
SMIB 5 : stn DW 81, 110 m : 1 ex. — Stn DW 96, 245 m : 1 ex.
Loyalty Islands. MUSORSTOM 6 : stn DW 456, 240 m : 1 ex. — Stn DW 461, 240 m : 3 ex.
Chesterfield Islands. CHALCAL 1 : stn CP 10, 225 m : 3 ex.
Wallis and Futuna Islands. MUSORSTOM 7 : stn DW 495, 180-210 m : 3 ex. — Stn DW 505, 245-400 m : 35 ex. — Stn CP 509, 200-240 m : 53 ex.

SIZE. — Males : 10 x 13 - 20 x 26 mm; females : 7.5 x 10 - 15 x 19 mm.

DISTRIBUTION. — This species has been reported from East African waters (CROSNIER, 1984 : 185-210 m), Sri Lanka (LAURIE, 1906), Indonesia (STEPHENSON, 1972a : 100 m), Philippines (STEPHENSON & REES, 1967b : 93 to 139 m; MOOSA, 1981b : 107-96 m). It has not been reported previously from the New Caledonian area or the Wallis and Futuna Islands; the 245 m record is the deepest reported for this species.

Portunus haanii (Stimpson, 1858)

Amphitrite Haanii Stimpson, 1858 : 38, 39.
Portunus haanii - STEPHENSON & COOK, 1973 : 429, figs 6A-H, 7A-H, 8A-H, 9A-B, 10A, C-E, G-H.

MATERIAL EXAMINED. — **New Caledonia**. LAGON : stn DW 538, 191 m : 1 ex.
SMIB 6 : stn DW 127, 205 m : 3 ex. — Stn DW 128, 215 m : 1 juv.

MUSORSTOM 4 : stn DW 149, 165 m : 4 ex. — Stn DW 150, 110 m : 1 ex. — Stn DW 151, 200 m : 1 ex.
Chesterfield Islands. MUSORSTOM 5 : stn DW 346, 345-252 m : 1 ex.

DISTRIBUTION. — *Portunus haanii* has a very wide distribution, but has never been reported from New Caledonian and neighbouring waters. The previous maximum depth reported was 165 m by STEPHENSON and COOK (1973). Hence the present 345-252 m record is the deepest ever reported.

Portunus hastatoides Fabricius, 1798

Portunus hastatoides Fabricius, 1798 : 368. — STEPHENSON & CAMPBELL, 1959 : 101, textfigs 2D, 3D, pl. 1 fig. 4, pls 4D-5D. — CROSNIER, 1962 : 18, figs 96, 109, 117, 123. — STEPHENSON, 1972b : 14, 40.

MATERIAL EXAMINED. **Chesterfield Islands**. CHALCAL 1 : stn DC 33, 205 m : 9 ex.

DISTRIBUTION. — *P. hastatoides* is widely distributed in the Indo-West Pacific regions at depths of less than 100 m. This is the first record from the New Caledonian area. The present record is the deepest ever reported.

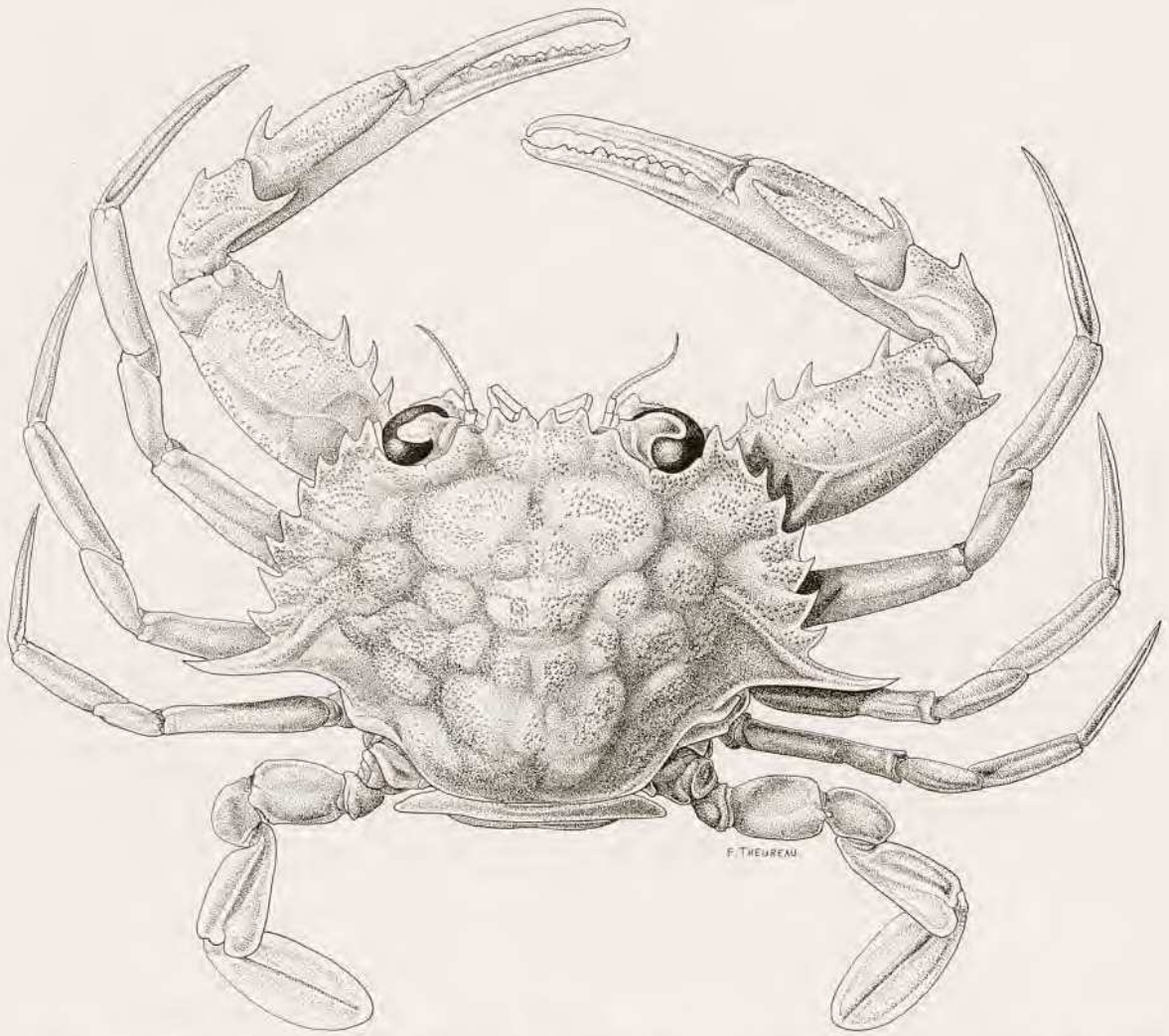

FIG. 7. — *Portunus lecromi* sp. nov., ♂ 20 x 30 mm, holotype. Chesterfield Islands, CHALCAL 1, stn DC 3, 120-150 m (MNHN-B 22836).

Portunus lecromi sp. nov.

Figs 7-8

MATERIAL EXAMINED. — **Chesterfield Islands**. CHALCAL 1 : stn DC 3, 120-150 m : 1 ♂ 20 x 30 mm (MNHN-B 22836).

TYPE. — The only specimen known is the holotype.

DESCRIPTION. — Front with four acute lobes, median lobes smaller than laterals, separated by a wide and deep notch directed slightly anterolaterally; lateral lobes about one 1.5 times larger than medians, but projecting only slightly beyond medians. Carapace about 1.5 times as broad as long; regions well pronounced, granulated; the following ridges present : curved epibranchial, mesobranchial, cardiac, and metagastric. Granular patches, besides those on carapace regions, are on rostral plate, on base of first to eighth anterolateral teeth and on posterolateral region. Anterolateral border of carapace armed with nine sharp teeth; last tooth the longest, directed laterally with tip slightly curved anterolaterally. Posterior angle of carapace rounded.

Third maxilliped of moderate size, granulate, with thick setae on inner and upper margins, including outer angle; merus slightly longer than broad, outer angle produced laterally.

Chelipeds long (longer than carapace width) almost equal in size; arm robust, dorsal surface faintly granulate, anterior border with four spines gradually lengthening distally, posterior border with sharp spine, distal half of posterior margin granulate; wrist armed with sharp spine at inner angle, outer surface with spine, surface sparsely granular; dorsal surface of hand with outer and inner ridges, inner ridge terminates in a sharp spine; outer surface of hand costate, ventral surface squamiform.

Second to fourth pereiopods gradually shortening, second the longest; dactyli of second to fourth a little longer than propodi.

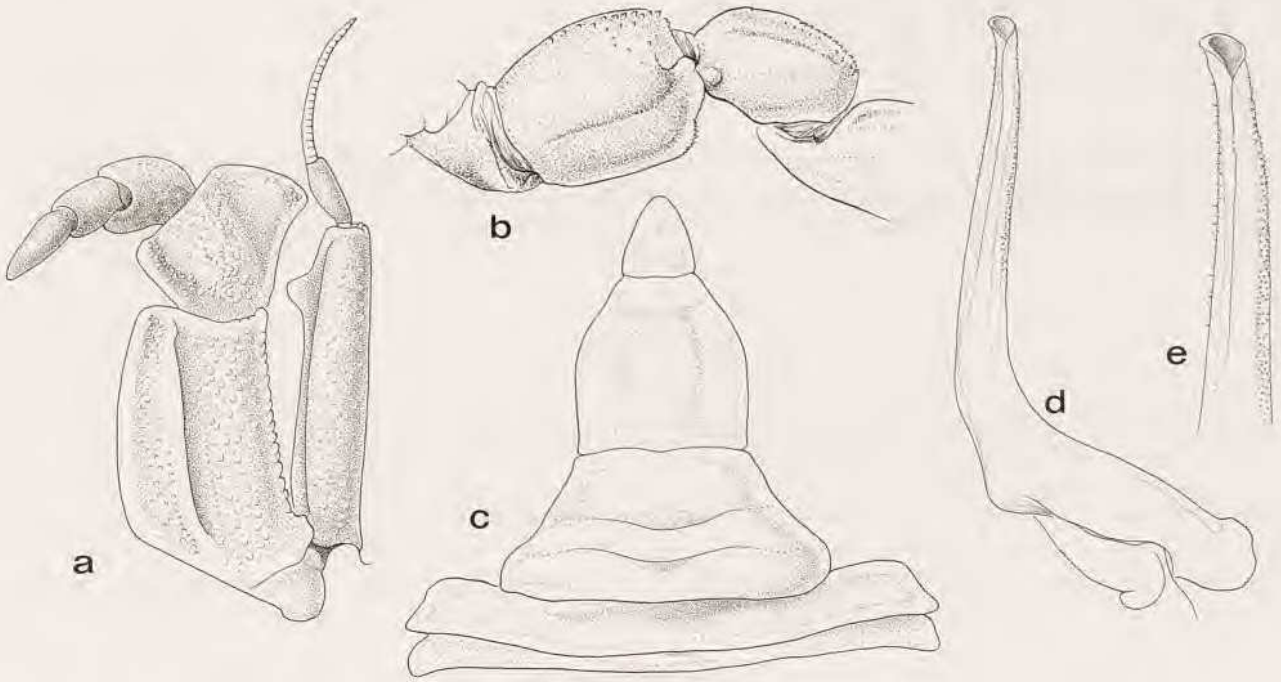

FIG. 8. — *Portunus lecromi* sp. nov., ♂ 20 x 30 mm, holotype. Chesterfield Islands, CHALCAL 1, stn DC 3, 120-150 m (MNHN-B 22836) : **a**, left third maxilliped; **b**, ischium, merus and carpus of right fifth pereiopod; **c**, abdomen; **d**, first pleopod; **e**, tip of first pleopod.

Fifth pereiopod natatory; merus short and broad, length about two-thirds width, posterior margin serrated, anterior margin covered with long hairs; carpus and propodus with hairs on margins; posterior margin of propodus not spinulate; dactylus lanceolate, apex rounded.

Male abdomen relatively broad, distal segment covered with tufts of fine, short setae and about as long as broad, apex rounded; penultimate segment relatively large, about as broad as long, concave on posterior margin, strongly convergent over anterior half.

First male pleopod almost straight over two-thirds its length, apex open like the mouth of a tube; anterior margins with short spinules which are more closely packed on outer side.

REMARKS. — *Portunus lecromi* sp. nov. resembles in general appearance *P. argentatus* (A. Milne Edwards, 1861), *P. australiensis* Stephenson & Cook, 1973, *P. haani* (Stimpson, 1858) and *P. petreus* (Alcock, 1899), but differs from them mostly in the characters of rostral lobulation and the form of the first male pleopod. *P. lecromi* has much sharper and longer median rostral lobes than the above mentioned species which have short and relatively blunt median lobes. The first male pleopod of *P. lecromi* is straight along two-thirds its length, instead of being curved to strongly-curved in the other four species. These differences are sufficient to designate it as new.

ETYMOLOGY. — This species is dedicated to Mr Albert LE CROM, fishing master, who participated in almost all the expeditions whose materials are studied herein.

DISTRIBUTION. — Known only from the type locality, Chesterfield Islands, at 120-150 m depth.

Portunus orbitosinus Rathbun, 1911

Portunus orbitosinus Rathbun, 1911 : 205, pl. 15 fig. 11. — STEPHENSON & CAMPBELL, 1959 : 113, figs 2L, 3L; pl. 3 fig. 4, 4L, 5L. — CROSNIER, 1962 : 55, figs 88, 90-91, 93. — STEPHENSON, 1972a : 15, 41.

MATERIAL EXAMINED. — **New Caledonia**. LAGON : stn DW 933, 100 m : 1 ex. — Stn CP 1062, 300-320 m : 1 ex.

DISTRIBUTION. — This species has a wide distribution, being reported from East African waters to Indonesia, Philippines, Japan and Australia westward to Marianas at depths of less than 100 m. The present record is new for New Caledonian waters. The depth of 300-320 m recorded here should be treated with caution. The preceding two stations were shallow-water stations of less than 20 m depth.

Portunus stephensoni Moosa, 1981

Portunus emarginatus Stephenson & Campbell, 1959 : 107, figs 2H, 3H, pl. 2 figs 4, 4H, 5H. Non Leach, 1814.
Portunus stephensoni Moosa, 1981a : 108.

MATERIAL EXAMINED. — **New Caledonia**. LAGON : stn CP 1062, 300-320 m : 2 ex.

REMARKS. — MOOSA (1981a) proposed the name *Portunus stephensoni* to replace *P. emarginatus* Stephenson & Campbell, 1959, a junior homonym of *P. emarginatus* Leach, 1814.

DISTRIBUTION. — This species has been reported from Mauritius, Philippines, Indonesia, Australia, and Palau Islands at depths of less than 30 m. The present record is new for New Caledonian waters. The 300-320 m depth presented here should be treated with caution. The preceding two stations were shallow-water stations of less than 20 m depth.

Genus *THALAMITA* Latreille, 1829

Thalamita spinifera Borradaile, 1902

Fig. 10 e

Thalamita exetastica var. *spinifera* Borradaile, 1902 : 202.
Thalamita spinifera - EDMONDSON, 1954 : 269, figs 41, 42a. — STEPHENSON & HUDSON, 1957 : 317, 320. — CROSNIER, 1962 : 125, figs 210-211, 214-215, pl. 11 fig. 1; 1975 : 722, figs 5a, 6a-c. — STEPHENSON & REES, 1967a : 93, fig. 34. — STEPHENSON, 1972b : 17, 51.

MATERIAL EXAMINED. — **New Caledonia**. CHALCAL 2 : stn DW 80, 80-160 m : 1 ♀ 11 x 15 mm, left cheliped, second and fourth legs missing. — Stn DW 84, 170 m : 1 ovig. ♀ 12 x 18 mm.
SMIB 6 : stn DW 107, 205 m : 1 ♀ 8.5 x 13 mm.
Wallis and Futuna Islands. MUSORSTOM 7 : stn CP 498, 105-160 m : 1 ♀ 9.5 x 15 mm. — Stn CP 505, 145-400 m : 1 ♀ 13.5 x 19 mm. — Stn CP 515, 224-252 m : 1 ♂ 13 x 19 mm, photographed (MNHN-B 22835).
Indonesia. KARUBAR. *Kai Islands* : stn DW 22, 124-85 m : 1 ♂ 6 x 9 mm.

REMARKS. — These specimens, except the ovigerous female (Stn DW 84), have the widest breadth at the level of the third anterolateral teeth, rather than at the fifth as in *T. macrospinifera* Rathbun, 1911. CROSNIER (1975) separated *T. pseudospinifera* Crosnier, 1975 from *T. macrospinifera* based on the greatest width of the carapace at the third anterolateral teeth in the first species, and at the fifth anterolateral teeth in the latter, along with the presence of a transverse cardiac ridge on the carapace which is well marked instead of being absent as in *T. macrospinifera*. All the specimens show the presence of a small ridge posterior to the mesobranchial ridge. The submedian frontal lobes are almost flat and much wider than the medians. The form of the first male pleopod is closer to that of *T. pseudospinifera* and *T. spinifera*, as figured by CROSNIER (1975), rather than to *T. macrospinifera*, as also figured by CROSNIER (1962, 1975). The present specimens are therefore closer to *T. spinifera* in having the marked transversal cardiac ridge and an additional ridge posterior to the mesobranchial ridge, and in the form of male pleopod. The ovigerous female has large fifth anterolateral teeth, as a result of which the widest part of the carapace falls at the level of the fifth teeth. The small male specimen from KARUBAR has the fourth anterolateral tooth smaller than the fifth, but the widest part of the carapace is between the third teeth. I am inclined to place the present specimens in *T. spinifera*.

DISTRIBUTION. — *Thalamita spinifera* has been reported from the Comoro Islands (Mayotte) to Thailand, Indonesia (Java Sea, Sunda Strait, Ambon Bay, Banda and Kai Islands), and westward to Hawaii, at less than 100 m depth. The present record is new for New Caledonian and South Pacific waters and the depth (at least 224 m) is the greatest ever reported.

ACKNOWLEDGMENT

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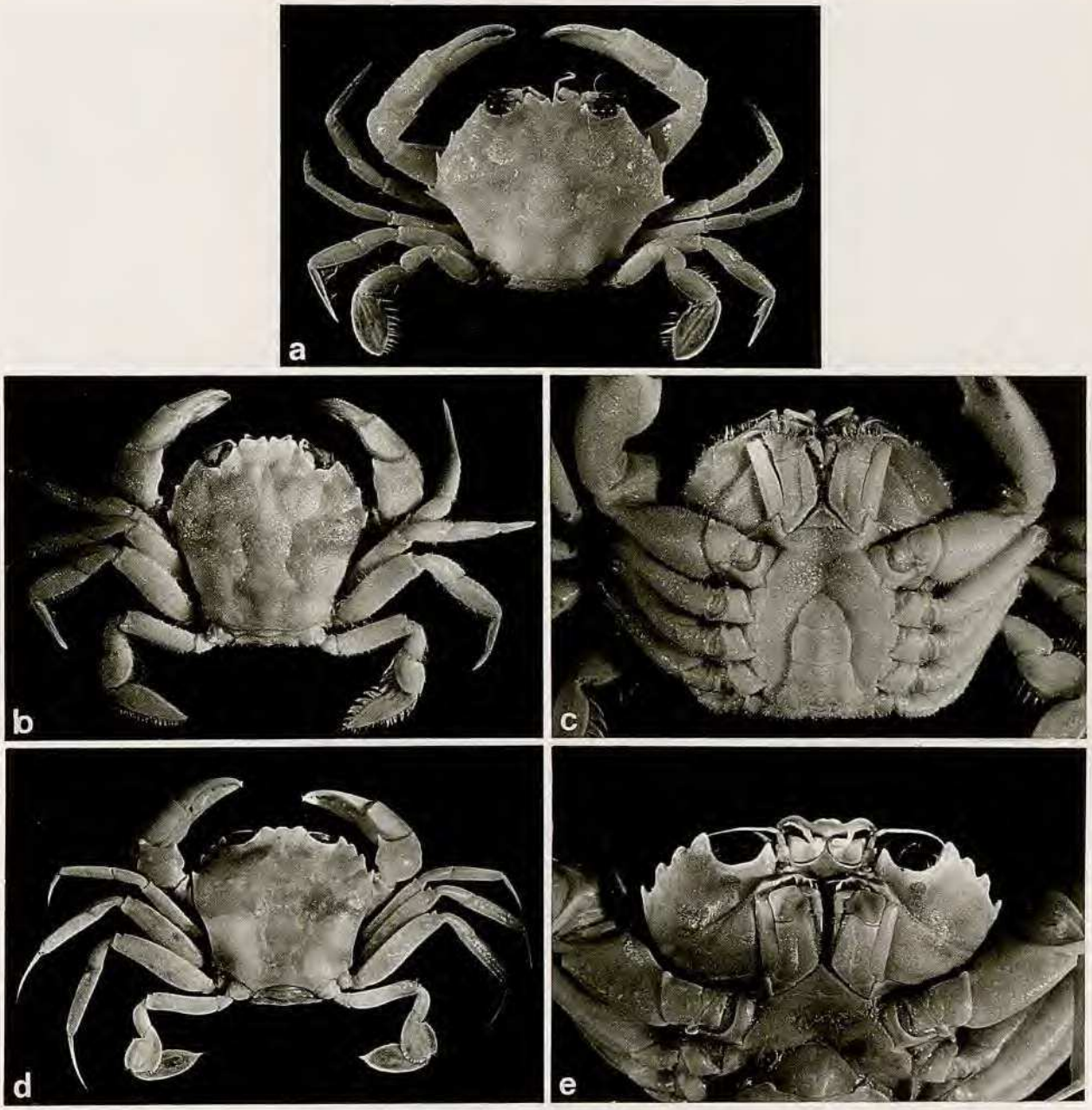

FIG. 9 a. — *Nectocarcinus caledonicus* sp. nov., ♂ 12 x 16 mm, holotype. Chesterfield Islands, MUSORSTOM 5, stn DW 252, 300-310 m (MNHN-B 22816).

FIG. 9 b-c. — *Nectocarcinus pubescens* sp. nov., ♂ 25 x 25.5 mm, holotype. New Caledonia, MUSORSTOM 4, stn CC 201, 500 m (MNHN-B 22829).

FIG. 9 d-e. — *Benthochascon hemingi* Alcock & Anderson 1899, ♀ 40 x 45 mm. New Caledonia, HALIPRO 1, stn CP 854, 650-780 m (MNHN-B 22832).

FIG. 10 a-b. — *Brusinia profunda* sp. nov., ♂ 14 x 11 mm, holotype. New Caledonia, MUSORSTOM 4, stn CP 192, 320 m (MNHN-B 22823).

FIG. 10 c-d. — *Charybdis (Charybdis) rosaea* (Jacquinot, 1846), ♀ 20 x 26.5 mm, Indonesia, KARUBAR, stn CC 42, 354-350 m (MNHN-B 22834).

FIG. 10 e. — *Thalamita spinifera* Borradaile, 1902 : **e**, ♂ 13 x 19 mm. Wallis and Futuna Islands, MUSORSTOM 7, stn CP 515, 224-252 m (MNHN-B 22835).